

MARMARA UNIVERSITY
EUROPEAN COMMUNITY INSTITUTE

**REVISED MEDITERRANEAN ACTION PLAN (MAP) FOR A
SUSTAINABLE MEDITERRANEAN ENVIRONMENT**

Thesis Submitted in Partial Fulfilment of the Requirements
For the degree in
MASTER OF ARTS

Resül Orçun Pulat

İstanbul, 2007

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Supervisor: Assist. Prof. Dr. Özlem Yücel

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LIST OF ABBREVIATIONS

AFP	-	Agence France Presse
BATS	-	Best Available Techniques
BEPs	-	Best Environmental Practices
BOD	-	Biochemical Oxygen Demand
BP/RAC	-	Blue Plan Regional Activity Centre
CAMPs	-	Coastal Area Management Programmes
CBD	-	UN Convention on Biological Diversity
CMDD	-	La Commission Méditerranéenne Du Développement Durable
CP/RAC	-	Clean Production Regional Activity Centre
EC	-	European Community
EEA	-	European Environment Agency
EIA	-	Environmental Impact Assessment
ERS/RAC	-	Environment Remote Sensing Regional Activity Centre
EU	-	European Union
GEF	-	Global Environment Facility
GPA	-	Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities
GTZ	-	Deutsche Gesellschaft für Technische Zusammenarbeit
100 HS	-	Programme for the Protection of Coastal Historic Sites
ICAM	-	Integrated Coastal Area Management
IMCZ	-	Integrated Management of Coastal Zones
IMO	-	International Maritime Organisation
LBS	-	Land-based Sources
LIFE	-	Financial Document for Environment
M. A.	-	Master of Arts
MAP	-	Mediterranean Action Plan

MARPOL	-	International Convention for the Prevention of Pollution from Ships
MEDO	-	Mediterranean Environment and Development Observatory
MED POL	-	The Programme for the Assessment and the Control of Pollution in the Mediterranean Region
MEDU	-	MAP Coordinating Unit
MCSD	-	Mediterranean Commission on Sustainable Development
NFPs	-	National Focal Points
NGOs	-	Non-governmental Organisations
OECD	-	Organisation of Economic Cooperation and Development
OSPAR	-	Convention for the Protection of the Marine Environment of the North-East Atlantic
PAM	-	Le Plan d'Action pour la Méditerranée
PAP/RAC	-	Priority Actions Programme Regional Activity Centre
PNUE	-	Programme des Nations Unies pour Environnement
POPs	-	Persistent Organic Pollutants
RACs	-	Regional Activity Centres
RCUs	-	Regional Coordination Units
REC	-	The Regional Environmental Center for Central and Eastern Europe
REMPEC	-	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea
SAP BIO	-	The Strategic Action Programme for the Conservation of the Biological Diversity
SGP	-	Small Grants Programme – Küçük Destek Programı
SMAP	-	Short and Medium Term Priority Environmental Action Programme
SPA	-	Specially Protected Area
SPAMIs	-	Specially Protected Area of Mediterranean Importance
SPA/RAC	-	Specially Protected Areas Regional Activity Centre

TÜBİTAK	-	Türkiye Bilim ve Teknik Araştırma Kurumu
TÜRSAB	-	Türkiye Seyahat Acentaları Birliği
TV	-	Television
UN	-	United Nations
UNCLOS	-	United Nations Convention on the Law of the Sea
UNEP	-	United Nations Environment Programme
UNFCCC	-	UN Framework Convention on Climate Change
USA	-	United States of America

INTRODUCTION

Human beings have tried to exploit the nature in favour of themselves since their existence. The scientific and technological developments have increased the exploitation level of nature. They have never thought to limit their consumption level of natural resources. However, such an exploitation and consumption as if the natural resources are limitless causes inevitable environmental problems which may lead to disastrous consequents for all living creatures.

Environmental problems that harm all living creatures on earth involve the pollution and degradation of air, soil and water. The degradation of air and water quality, the destruction of flora, deforestation, the extinction of animal species, radioactive pollution, noise, the destruction of historical sites are important kinds of environmental challenges. These problems have become clearly visible since the second half of the twentieth century. Especially, the close interaction between the scientific developments, industrialisation, migration and urbanisation caused to have a serious pressure on environment.¹

The scientific developments triggered the process of industrialisation. However, the extension of industrialisation caused to the extension of pollution based on production. Moreover, industrialised regions, generally the cities attracted people from rural areas because of employment facilities. Migration from rural areas to industrialised cities caused to rapid and unplanned urbanisation that increased the level of pollution. The Mediterranean basin is one of the regions in the world that faces these pressures. There is a lack of environmental management especially in southern and eastern Mediterranean. Industrial wastes and uncontrolled urban growth are the major problems which threat the marine and coastal environment of the Mediterranean.

¹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 22-24.

Environmental problems have a transboundary character. Pollution in a local area affects the other regions sooner or later. Wastes, which are left into the marine environment without any treatment from a coastal country, potentially reach the coasts of another country and threaten both the nature and human health.

When the environmental problems became clearly visible especially after the sixties because of rapid industrialisation and urbanisation in the world, national governments began to realise the transboundary character of environmental problems. This fact revealed the vitality of international cooperation in the protection of the environment. To overcome the global and regional environmental problems, common legal measures had to be implemented and common environmental policies had to be followed by the countries.

The United Nations (UN), aware of the vitality of international cooperation in the field of environmental protection, encourages international cooperation, organises international conferences and initiates action plans on the environment. These initiatives involve regional conventions and action plans. In 1975, the United Nations Environment Programme (UNEP), which is the body of the UN concerning environmental affairs, organised an international meeting in Barcelona about the protection of the Mediterranean environment as it is one of the unique ecosystems in the world. The Mediterranean countries including the European Community (EC) came together in that meeting and adopted the Mediterranean Action Plan (MAP).

The Plan, which targets to focus on and solve the environmental problems of the Mediterranean, has different components. The major components of the MAP are legal, institutional, management, financial and scientific components. At first, the legal component of MAP involved a framework convention namely the Barcelona Convention and its two protocols.

In 80s and 90s the development process of international attempts on environment protection continued under the leadership of UN. New international documents were adopted by UN such as declarations, action plans and international conventions were prepared. All of these documents are the sources of international environmental law which involve the modern principles of environmental law such as the principle of sustainable development and the precautionary principle.

Following the Rio Summit (1992), the legal documents of MAP were revised in 1995. The revision involved the integration of modern concepts into MAP legal framework such as sustainable development, the precautionary principle, integrated coastal area management and clean production. The aim of the revision was to strengthen the legal structure and to create a sustainable Mediterranean marine and coastal environment. To reach this aim the legal documents of MAP were amended and moreover, new legal instruments were signed. Today, the legal component of MAP involves a framework convention, the Barcelona Convention, and its six protocols.

In the light of this information the aim of the thesis is to explain why the revised MAP with its modernised legal structure can be seen as a hope for a sustainable Mediterranean environment. This study further suggests that the coastal states of the Mediterranean region should ratify and implement all Protocols of the revised Barcelona Convention as soon as possible before losing the unique nature of the Mediterranean. During and after the ratification process, the modern strategies of public awareness, information and participation should be taken into account by the states for the better implementation of MAP.

To reach the results above, in the first chapter, the basic physical characteristics of the Mediterranean environment are introduced. Later, the necessary information is given about many kinds of pressures on Mediterranean ecosystem and the state of its pollution.

In the second chapter, first; the evolution of international environmental cooperation and law until the birthday of MAP are introduced. Second, MAP, which is an output of an international initiative under the leadership of UN, historical evolution of the Plan and its legal structure are explained together with important international environmental documents.

In the third chapter, the international environmental law principles are examined that take place in revised Barcelona Convention, the main legal framework of MAP. These are; the principle of sustainable development that is the main point of MAP's legal revision, the precautionary principle, the polluter pays principle, environmental impact assessment, management of coastal areas and integration principle.

In the fourth chapter, the conservation system of revised MAP and the prevention of pollution originating from different sources are explained in the light of the articles of the revised Barcelona Convention that mentions the obligations of the Parties. The crucial articles of the revised Barcelona Convention and the crucial points of its Protocols concerning the protection of the environment are compared with the articles of modern international environmental law documents and former texts of the Barcelona Convention and its Protocols.

In the fifth chapter, the legal and practical performances of European Union (EU) and Turkey, two contracting parties to the Barcelona Convention which are at different levels of industrialisation process and which are negotiating about the membership capacity of Turkey to the EU, are analysed under the framework of modern principles of environmental law that the revised MAP adopted.

In the sixth chapter, the revised MAP is evaluated from a critical point of view. Its positive sides are focused on and the problems of ratification of MAP's new legal texts are discussed. The lack of political will of the Parties about ratification of new legal texts, and the importance of public awareness and participation to put pressure on

decisionmakers in favour of revised MAP are stressed on. Lastly, the revised MAP, which has a new legal structure now, is addressed to be a solution to the environmental problems of the Mediterranean basin.

I. THE STATE OF MEDITERRANEAN ENVIRONMENT

1.1. PHYSICAL CHARACTERISTICS OF THE MEDITERRANEAN REGION

It is the biggest interior sea on earth that lies between three continents: Europe, Asia and Africa. At the west side, it is connected to Atlantic Ocean with Gibraltar Strait, at the north-east side it is connected to Marmara Sea with Çanakkale Strait (Dardanelles) and at the south-east side it is connected to Red Sea with Suez Canal. The total area of Mediterranean Sea is 2.512.300 square kilometres including Marmara Sea. The biggest island of the Mediterranean Sea is Sicily, in the south of Italy.²

In more than half of the coastal areas, cliffs are dominant especially in northern coasts. However, delta areas of some main rivers facilitate sandy beaches such as the Rhone delta area in Southern France and the Po Plain in Italy. Coastal plains and sandy beaches cover the majority of the Southern coasts from Tunisia to Israel.³

In general, the climate of the Mediterranean region is mild that it is ideal for tourism. Winter is not so cold but it is rainy and windy. Summer, on the other hand, is hot and arid. Autumn is not so long. It is difficult to say something certain about spring that it is a changeable transitory season.⁴ Temperature differences between seasons are not high. The highest difference is 15 C.⁵ Precipitation rates change from a region to

² **AnaBritannica**, Hürriyet, Volume 1, 1993, p. 256.

³ **State and Pressures of the Marine and Coastal Mediterranean Environment**, European Environment Agency (EEA), Luxembourg: Office for official publications of the European Communities, 1999, p. 30,31.

⁴ **The Mediterranean Sea**, TURMEPA, http://www.turmepe.org.tr/en_bilgi_merkezi.php?ref=7 (Feb. 10, 2005, 10.00).

⁵ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 35.

another. They are low in the coasts of Northern Africa while in Dalmatian Coasts of Croatia there are places with 2.5 m. per year.⁶

Fish stocks of the Mediterranean Sea are rich in diversity but small in quantity. That character of the Mediterranean Sea shapes the fisheries industry. In spite of big floes, small vessels are active in fisheries industry of Mediterranean Sea Area. Fishes caught by anglers for commercial purposes are usually open sea species living in the upper layers of the sea such as sardine, tuna, anchovy and mackerel. They also hunt deep-sea species such as turbot, sole, plaice, brown meagre, red mullet, goby, red gurnard, grouper, shark, catshark, whiting, eel, and grey skate. They generally use the method of trawling while catching these fishes. Overexploitation of fish stocks cause problems in fisheries industry that some of the anglers leave the sector.⁷

There are also other sea creatures such as lobster and prawn, which live in rocky coasts. The population of oysters and mussels is dense especially in the shallow, muddy coasts. The sponges and the corals of Naples can also be added into this group.⁸

Lastly, there exist energy resources in the Mediterranean basin. These are oil beds near Tunis, Sicily and Spain and natural gas in the Adriatic Sea.⁹

⁶ **The Mediterranean Sea**, TURMEPA, http://www.turmepa.org.tr/en_bilgi_merkezi.php?ref=7 (Feb. 10, 2005, 10.00).

⁷ Ibid.

⁸ Ibid.

⁹ **AnaBritannica**, Hürriyet, Volume 1, 1993, p. 258.

1.2. PRESSURES AND THE STATE OF POLLUTION OF THE MEDITERRANEAN

People began to realise the pollution of the Mediterranean Sea in 1960's. In 1972, Lord Peter Ritchie-Calder¹⁰, commented about the state of the Mediterranean. According to him, the Mediterranean marine and coastal environment gave warnings. The main reason why the Mediterranean environment faced with problems was the industrial pollution. The industrial pollution was poisoning the land, the beaches and the sea. Bathers and people who eat seafood would face with health problems. Moreover, the flora on land would be suffocated by polluted sea winds.¹¹

Now, the reality of the diagnosis can be easily understood after thirty-three years. Some kinds of sea creatures are rarely seen. For example, sea horses are no longer alive as beauties of underwater so meeting one of them while diving is a miracle. The number of different kinds of fishes has diminished dramatically for the last thirty years.

In early twentieth century, the traffic of tankers increased in waterways of the Mediterranean Sea. The increase in traffic made the pollution more visible. As a result, the state of the Mediterranean Sea caused to awareness and sensitiveness about the state of the Mediterranean Sea in universities, media and non-governmental organizations (NGO's). According to Xavier Pastor¹², if the growing assault on Mediterranean environment continued, the Mediterranean ecosystem would never be the same again.¹³

¹⁰ See "**Lord Peter Ritchie Calder (1906-1982)**, Authors Section, The Brightpath Company, <http://brightpath.hypermart.net/QN/QNAuthors.htm> (July 21, 2005, 12.15)".

¹¹ Haas, Peter M., **Saving the Mediterranean**, Columbia University Press, New York, 1990, p. 66.

¹² See "**Xavier Pastor**, Greenpeace: 25 anys de lluita per la pau verda, <http://www.uv.es/~ramos/gan/greenpea.html> (July 21, 2005, 12.50)".

¹³ Talu, Aslı Zeynep, **Saving the Mediterranean: MED Plan and International Cooperation** (M. A. Thesis), Bilkent University, June 1995, p. 2.

Nowadays, climate change is the most important environmental phenomenon. The glaciers are melting; the oceans' water is warming and covering the lands. This change, of course, reflects to the Mediterranean environment. According to a recent UNEP study, if the average temperature increases 1.5 degrees centigrade by 2025, Mediterranean nature and people will face very serious environmental problems. Some of these problems are the reduction in the availability of fresh water which may cause the death of thousands of people, increased demand for irrigation water which may reduce agricultural production, inundation of portions of deltas, wetlands and settlements which may destroy habitats, increased beach erosion etc. Especially some sensitive areas are more open to these problems such as the deltas of the Ebro, Rhone, Po and Nile rivers.¹⁴

This study only predicts the possible environmental problems. It does not give any certain information about the extent and timing of these environmental changes. Nevertheless, the public and private sector authorities of the Mediterranean countries should be prepared if they do not want to face an environmental catastrophe.¹⁵

The increasing population rate is a serious threat to the Mediterranean environment. Statistics show that the population of the Mediterranean coastal states increases. Although the total population of the Mediterranean coastal states was only 225 million in 1957, it reached approximately 450 million in 1997. If the trend does not face a radical change, the total population may be 600 million in 2050 and 700 million by the end of this century. There is also one another problem. That is the high rate of population density on the narrow coast line. Today, approximately one third of the total population lives on the narrow coast.¹⁶ Because of the density and the increasing rate of the Mediterranean population, the control and prevention of pollution become harder.

¹⁴ **The Environmental Program for the Mediterranean, Preserving a Shared Heritage and Managing a Common Resource**, The World Bank – The European Investment Bank, 1990, p. 55.

¹⁵ Ibid.

¹⁶ Ehlers, Peter, Mann-Borgese, Elisabeth & Wolfrum, Rüdiger, **Marine Issues; From a Scientific, Political and Legal Perspective**, Kluwer Law International, Great Britain, 2002, p. 165.

Table 1: Total Population from 1950 to 1995 (in thousands)

Country or territory	1950	1960	1970	1980	1990	1995
Albania	1 250	1 626	2 184	2 720	3 258	3 383
Algeria	9 181	10 197	13 623	18 577	24 864	28 047
Bosnia-Herzegovina	2 674	3 221	3 697	4 085	4 341	4 130
Croatia	3 842	4 131	4 399	4 584	4 747	4 830
Cyprus	483	574	618	639	697	726
Egypt	21 504	25 959	32 614	41 020	52 392	58 066
France	41 614	45 527	50 569	53 848	56 619	58 168
Greece	7 159	8 262	8 719	9 638	10 211	10 278
Israel	1 258	2 073	2 935	3 761	4 545	5 638
Italy	47 248	50 287	53 758	56 329	57 581	57 333
Lebanon	1 364	1 787	2 206	3 075	3 130	3 340
Libya	947	1 350	1 933	3 068	3 964	4 934
Malta	309	318	319	333	356	372
Monaco	18	21	24	27	30	32
Morocco	8 975	11 672	15 081	19 390	24 016	26 588
Palestinian Authority	1 026	1 159	1 134	1 348	1 691	2 523
Slovenia	1 465	1 580	1 713	1 875	1 958	1 990
Spain	28 124	30 585	34 027	37 379	38 949	39 525
Syria	3 495	4 561	6 277	8 753	12 115	14 342
Tunisia	3 517	4 067	4 975	6 316	8 007	8 992
Turkey	20 960	27 758	35 666	44 740	56 477	61 399
Yugoslavia	7 099	8 021	8 886	9 803	10 343	10 800
MEDITERRANEAN TOTAL	213 509	244 734	285 357	331 305	380 290	405 436

Source: Urbanisation in the Mediterranean Region from 1950 to 1995, Blue Plan Papers 1, UNEP/MAP/Plan Bleu, Plan Bleu Centre D'activité Régionale, Sophia Antipolis, 2001, p. 3 http://planbleu.org/publications/cahiers1_urbanisation_uk.pdf (Oct. 13, 2005, 18.41).

Tourism is a crucial economic activity in the Mediterranean Region. It contributes much to national income levels of coastal states.¹⁷ The summer tourism in

¹⁷ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 5,

the Mediterranean region causes to seasonal population explosion. The beauty of the Mediterranean coastal and marine environment attracts tourists so much. The population of Mediterranean coastal cities and towns doubles in the summer. More than half of the tourists prefer coastal cities; even in some countries, this rate reaches 90%.¹⁸ That means not only more waste thrown in the sea but also more buildings constructed on the narrow coast in order to earn more money.

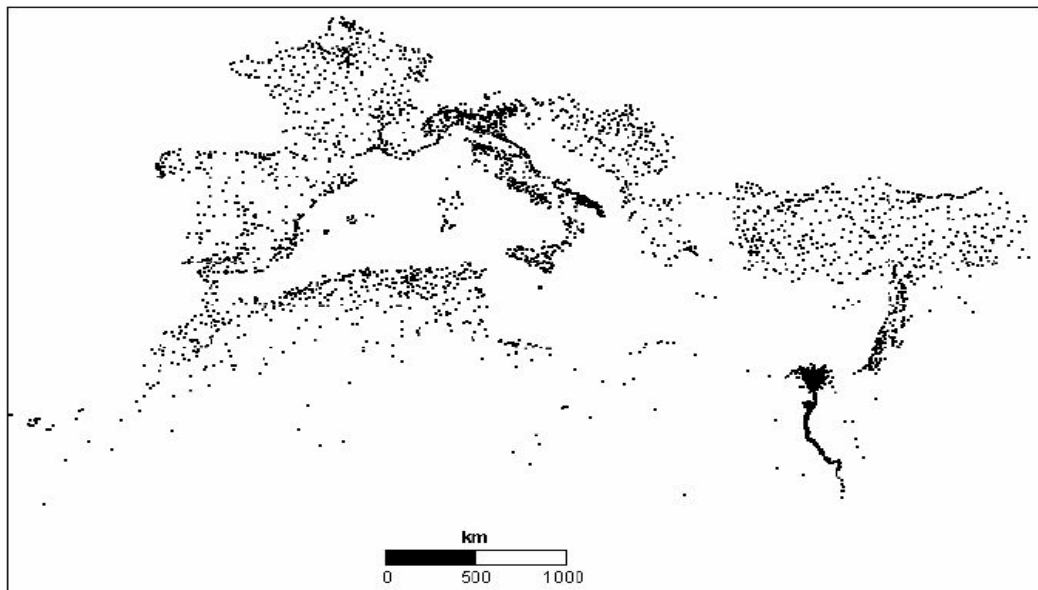
Over the second half of the 20th century, increasing demand for coastal places has reflected to a fast and unplanned development not only in the north but also in the south. Serious problems have appeared in connection with this fast process. These are uncontrolled urbanisation, which has led to degradation of the environment, cruel competition of different sectors such as farming, industry, transport, tourism, housing and so on, which has led to the scarcity of natural resources (land and water), and lastly the increase in the amount of pollution which is a threat for nature, for humanity.¹⁹

http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁸ Ehlers, Peter, Mann-Borgese, Elisabeth, & Wolfrum, Rüdiger, **Marine Issues; From a Scientific, Political and Legal Perspective**, Kluwer Law International, Great Britain, 2002, p. 165.

¹⁹ Koçer, Banu, **The Environmental Policy within the Framework of Euro-Mediterranean Partnership** [Master of Arts (M.A.) Thesis], Marmara University European Community Institute, İstanbul, 1998, p. 30,31.

Map 1: Urban-area patterns with 10,000 inhabitants and more in 1995



Source: Urbanisation in the Mediterranean Region from 1950 to 1995, Blue Plan Papers 1, UNEP/MAP/Plan Bleu, Plan Bleu Centre D'activité Régionale, Sophia Antipolis, 2001, p. 16 http://planbleu.org/publications/cahiers1_urbanisation_uk.pdf (Oct. 13, 2005, 18.41).

When the different sources of pollution in Mediterranean region are compared, it can be easily claimed that most of the pollution comes from lands. It is more than the half of all the pollution. Land-based sources of pollution involve agriculture, industry, urbanisation and so on.²⁰

In the southern coasts of the Mediterranean, the land-based sources of pollution, especially urbanisation and industry in connection with rapid population growth represent a serious problem. The capacity of the southern countries is not sufficient to tackle the problem. Their legal measures and environmental infrastructures are weak.²¹ For example, most of the municipal sewer systems let the wastes go into the sea without any treatment or with insufficient treatment. Moreover, some of the wastewater

²⁰ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 134.

²¹ Ibid.

treatment systems have faults that seepages of wastewater occur.²² Much quantity of industrial wastewater²³ reaches the sea and rivers directly without any treatment.²⁴ Such handicaps of southern developing countries speed up the degradation process of the Mediterranean environment.

Agriculture is another important pollution source considered in the framework of land-based sources. Some agricultural and land use activities cause pollution such as dairy farming, irrigation, cultivation. Recently, there has been a tendency towards the intensification of agriculture. Farmers want to increase their quantity of products. Their aim is to produce more products in a shorter time. To reach this aim, they use fertilisers and chemicals such as phosphorus, nitrogen, pesticides to increase their productivity. The chemicals used by farmers generally have negative effects on nature. These substances reach the sea through wetlands, rivers and groundwater in the form of sediment and chemical loads. They not only harm the marine ecosystem but also threat human health.²⁵

Shortly, the Mediterranean marine and coastal environment is in danger. Human beings are responsible that they create the danger. The egoist spirit of humanity let the rapid and unplanned development continue. That development process depends on the rise of consumerism that will never end. That kind of development tendency caused to overpopulation of coastal places. Developing coastal cities attract people with their employment facilities. Migration to coastal cities does not end. In near future, it will be almost impossible to live in big coastal cities because of fast overpopulation. There are problems, which accompany to overpopulation such as urbanisation, intensive

²² Ehlers, Peter, Mann-Borgese, Elisabeth & Wolfrum, Rüdiger, **Marine Issues; From a Scientific, Political and Legal Perspective**, Kluwer Law International, Great Britain, 2002, p. 165.

²³ “More than 200 petrochemical and energy installations, basic chemical industries and chlorine plants are located along the narrow Mediterranean coast and catchment basins of rivers, including at least 40 major oil refineries, in addition to cement plants, steel mills, tanneries, food processing plants, textile mills and pulp and paper mills”. See Ibid p. 166.

²⁴ Ibid. p. 166.

²⁵ Ibid.

agriculture, mass tourism, unrestricted coastal area development. All these put a threat for humanity, for native plant and animal species.²⁶

Today, wastewater treatment is not sufficient in many countries. The toxic substances, which reach the sea without facing any impediment, harm the balance of the Mediterranean ecosystem. Transport and industrial policies do not take into account the environmental concerns, so air pollution occurs. Air pollution damages not only the nature but also the archaeological sites. Consequently, varieties of factors disturb the Mediterranean ecosystem.²⁷ To eliminate these factors policymakers need to have a new vision.

²⁶ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 2.

²⁷ Ibid.

II. AN INTERNATIONAL INITIATIVE FOR A SUSTAINABLE MEDITERRANEAN: MAP

The transboundary problems of Mediterranean environment came to an extent that common initiative of coastal countries in international level became crucial. That initiative might be an international action plan which had the capacity to respond the needs of the region. Mediterranean Action Plan that aims to solve the problems of Mediterranean environment is the product of international cooperation between Mediterranean coastal countries.²⁸

2.1. THE WAY TOWARDS MEDITERRANEAN ACTION PLAN

Before summarising the historical process of international environmental law towards MAP, the concept of environmental law should be defined. Environmental law is a branch of law that protects the objects in natural and artificial human environment by legal measures. It is right to say that environmental law aims to protect the nature and man-made environment such as historical sites against the destructive human actions.²⁹

After 1960s environmental problems started to increase seriously. Local environmental problems gained a transboundary character. That process triggered international community to take the matter into consideration.³⁰ States and international institutions realized their common responsibilities and started to cooperate with each other concerning transboundary environmental problems. Common initiatives in

²⁸ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 2

²⁹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 48.

³⁰ Ertaş, Şeref, **Çevre Hukuku**, Dokuz Eylül Üniversitesi Hukuk Fakültesi Döner Sermaye İşletmesi Yayınları No:78, İzmir, 1997, p. 24,25.

international level caused the adoption of international documents which involve legal principles. As a result, environmental law started to develop in international level.³¹

Conventions, international customs and common principles of law are the basic sources of international environmental law.³² Judicial decisions and doctrine are accepted as subsidiary sources of international environmental law.³³

Moreover, a term which is called *soft law* is used especially in international economic law and international environmental law. Non-binding instruments or documents that have the appearance of law are considered under the framework of soft law.³⁴ These documents generally reflect the common tendency of states to international legal matters. So, the rules which take place in soft law documents possibly become international customs.³⁵ Most of the soft law documents are adopted in international conferences, summits and meetings which are initiated under the leadership of international organisations such as United Nations.³⁶

Soft law documents are generally in the form of declarations, reports, charters, action programmes. Many examples can be given such as Rio Declaration, Agenda 21: Programme of Action for Sustainable Development, the report namely ‘Our Common Future’, World Charter for Nature.³⁷

³¹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 93,94.

³² Kılıç, Selim, “Uluslararası Çevre Hukukunun Gelişimi Üzerine Bir İnceleme”, **Cumhuriyet Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi**, Cilt 2, Sayı 2, p. 135, <http://72.14.221.104/search?q=cache:WGY9Ww6uRdUJ:www.cumhuriyet.edu.tr/edergi/makale/123.pdf+%22%C3%A7evre+hukukunun+geli%C5%9Fimi%22&hl=tr&gl=tr&ct=clnk&cd=1> (Jan. 6, 2007, 21.39).

³³ Shelton, Dinah & Kiss, Alexandre, **Judicial Handbook on Environmental Law**, UNEP, 2005, p. 15, http://www.unep.org/dpdl/law/PDF/JUDICIAL_HBOOK_ENV_LAW.pdf (Dec. 30, 2006, 17.11).

³⁴ **International Environmental Law**, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14).

³⁵ Gündüz, Aslan, **Milletlerarası Hukuk Temel Belgeler-Örnek Kararlar**, Beta Basım Yayım Dağıtım AŞ, Geliştirilmiş 3. Baskı, İstanbul, 1998, p. 27.

³⁶ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 74.

³⁷ **International Environmental Law**, Georgetown Law Library, May 2006,

The origins of international cooperation and law on environment goes back to the last period of nineteenth century. In 1872, first initiative came from Swiss government that proposed the establishment of a commission responsible for the protection of migrating birds. In 1900, a Convention for the Preservation of Fauna in Africa was signed by European colonial states. In 1911, The North Pacific Fur Seal Treaty and in 1940, the Convention on Nature Protection and Wildlife Conservation in the Western Hemisphere was adopted. 1946 International Convention for the Regulation of Whaling was an important step for wildlife conservation that is still in force.³⁸

The maritime disasters happened in twentieth century took attention of international community in 1950s. The first initiative about the protection of sea is the 1954 International Convention for the Prevention of Pollution of the Sea by Oil. In 1958, the Convention on the High Seas also aimed to prevent maritime pollution. (That convention later inspired to the 1982 Convention on the law of the sea.) Later, some international agreements were signed to prevent the use and testing of atomic weaponry that can fully damage an ecosystem. These are the 1959 Antarctic Treaty and the 1963 Partial Test Ban Treaty. The last one before the Stockholm Conference of UN was the 1971 Ramsar Convention on the Conservation of Wetlands that was an important international step to preserve ecosystems.³⁹

The 1972 Stockholm Conference of UN (UN Conference on the Human Environment) is a milestone for international cooperation and law on environment. Because, after the conference, environmental law started to develop as an independent branch of law.⁴⁰ The representatives of more than a hundred countries were present at

<http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14).

Additionally see “Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı , Ankara, Ocak 2002, p. 98-100.

³⁸ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 8.

³⁹ Ibid. p. 8,9.

⁴⁰ Kılıç, Selim, “Uluslararası Çevre Hukukunun Gelişimi Üzerine Bir İnceleme”, **Cumhuriyet**

the conference. One of the most important results of the conference is the publication of a ‘non-binding’⁴¹ declaration concerning the relation between human and environment, the negative effects of human activities on environment, economical development problems of countries and living standards, international institutions and law.⁴²

The declaration involves twenty six principles most of which have a legal character. They involve legal concepts such as proclaiming rights and state responsibility.⁴³ According to the first principle, on one hand, every individual has a right to live in a suitable and healthy environment. However, on the other hand, every individual is responsible to protect the environment for the next generations. Here, the right to live in a suitable environment is stressed on.⁴⁴

In the second principle, the connection between environment protection and economical welfare is explained. Here, the first signal of sustainable development principle can be seen. The importance of international cooperation for the protection of environment is focused on in principle twenty fourth. In principle twenty five, the states are encouraged to guarantee the environmental projects of international institutions.⁴⁵ Here, the environment protection initiatives of UN are implied.

The principles above are very important basic steps for international environmental law. After the 1972 Stockholm Conference, most of these principles have

Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, Cilt 2, Sayı 2, p. 136, <http://72.14.221.104/search?q=cache:WGY9Ww6uRdUJ:www.cumhuriyet.edu.tr/edergi/makale/123.pdf+%22%C3%A7evre+hukukunun+geli%C5%9Fimi%22&hl=tr&gl=tr&ct=clnk&cd=1> (Jan. 6, 2007, 21.39).

⁴¹ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 12.

⁴² Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 212.

⁴³ Birnie, Patricia W. & Boyle, Alan E., **International Law & The Environment**, Clarendon Press-Oxford, New York, 1993, p. 45.

⁴⁴ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 212,213.

⁴⁵ Ibid.

been integrated into modern international binding legal documents on environment until today.

The concrete result of the Conference is United Nations Environment Program (UNEP). During the conference, the UN's member countries decided to establish a new body. Consequently, UNEP was established.⁴⁶ Although it did not have a legal personality of its own, it was a semi-autonomous subsidiary body of the UN and it had the capacity to enter into legal relationships such as contracts.⁴⁷

UNEP, that was established as a programme acted as a coordinator and catalyst rather than a specialized agency which has an operational mandate. It was headquartered in Nairobi and governed by a council of 58 members with a small operational budget.⁴⁸

Establishment of UNEP was an important step to solve global and regional environmental problems in international level. The duties of that body were to focus on and identify environmental problems, to encourage and coordinate international community for action.⁴⁹

⁴⁶ Koçer, Banu, **The Environmental Policy within the Framework of Euro-Mediterranean Partnership** (M. A. Thesis), Marmara University European Community Institute, İstanbul, 1998, p. 38.

⁴⁷ **Transnational Environmental Law**, Organisations-Institutions-Regimes, <http://www.jura.uni-muenchen.de/einrichtungen/ls/simma/tel/24.htm> (Jan. 9, 2007, 11.17).

⁴⁸ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 13.

⁴⁹ Koçer, Banu, **The Environmental Policy within the Framework of Euro-Mediterranean Partnership** (M. A. Thesis), Marmara University European Community Institute, İstanbul, 1998, p. 38.

2.2. HISTORICAL EVOLUTION OF MAP AND ITS LEGAL STRUCTURE

UNEP works for global and regional cooperation on protection of marine environment and coastal areas. It has a Regional Seas Programme, which was initiated in 1972 Stockholm Conference⁵⁰ and headquartered in Nairobi. The Programme provides an institutional framework for different marine ecosystems through its 18 Regional Seas Conventions and Action Plans.⁵¹

All Regional Seas Programmes have an action plan. These action plans are mostly supported by a legal structure. The legal structure involves a regional framework Convention and its Protocols on detailed issues. The Programmes also have their own institutional structure. They have their own Regional Coordination Units (RCUs) and many Regional Activity Centres (RACs). These RCUs and RACs manage the implementation of the action plans⁵²

UNEP directly administers six of the 18 Regional Seas Programmes by managing the secretariat functions through a Regional Coordinating Unit. The management includes the implementation of both financial and technical services, projects and activities. The Mediterranean Region in relation with Mediterranean Action Plan (MAP) and its legal framework Barcelona Convention is one of these regional seas programmes.⁵³

⁵⁰ **United Nations Environment Programme, Regional Seas Programme**, Who We Are & What We Do, <http://www.unep.org/regionalseas/About/default.asp> (Jan. 9, 2007, 23.41).

⁵¹ **United Nations Environment Programme, UNEP and the Marine Coastal Environment**, <http://unep.org/themes/marine/> (Jan. 9, 2007, 23.27).

⁵² **United Nations Environment Programme, Regional Seas Programme**, Who We Are & What We Do, <http://www.unep.org/regionalseas/About/default.asp> (Jan. 9, 2007, 23.41).

⁵³ **United Nations Environment Programme, Regional Seas Programme**, Programmes Administered by UNEP, http://www.unep.org/regionalseas/Programmes/UNEP_Administered_Programmes/default.asp (Jan. 9, 2007, 23.51).

UNEP is interested in both global and regional environmental problems. It gave a specific attention to Mediterranean Region. In 1975, UNEP organised an intergovernmental meeting in Barcelona about the Mediterranean marine environment. The Mediterranean countries' governments sent representatives to the meeting. These are Yugoslavia, Turkey, Tunisia, Syria, Spain, Morocco, Monaco, Malta, Libya, Lebanon, Italy, Israel, Greece, France Egypt and lastly Algeria. The principal result of that meeting is the adoption of MAP.⁵⁴

2.2.1 LEGAL STRUCTURE OF MAP

MAP is a soft law document as an action plan which focuses on sustainable development; conservation of nature; assessment, prevention and elimination of marine pollution; public information and participation in Mediterranean Region. It is an international document that is legally non-binding. However, it influenced the states politically about the adoption and implementation of international legal instruments (that are the Barcelona Convention and its Protocols).⁵⁵

The MAP, a regional initiative of UNEP, targets to concern with various aspects of pollution in certain areas. The Mediterranean countries may develop and follow some environmental strategies in the framework of the MAP. The MAP, compatible with the interests of the littoral countries, desires also to develop integrated economic planning. These are major components of MAP:

1. Management of natural resources

⁵⁴ Talu, Zeynep Aslı, **Saving the Mediterranean: MED Plan and International Cooperation** (M. A. Thesis), Bilkent University, June 1995, p. 42.

⁵⁵ International Environmental Law, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14). See also the text of MAP in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

2. The integrated planning⁵⁶ of the development
3. Pollution prevention system
4. Legal structure (the Convention and its Protocols)
5. Institutional and financial dimensions⁵⁷

From a legal point of view, the efficient implementation or realization of an international environmental action plan depends on an International Environmental Treaty Regime. International Environmental Treaty Regime involves some elements which are a treaty, the conference of the parties, secretariat and subsidiary bodies.⁵⁸

The legal structure of MAP is a typical International Environmental Treaty Regime. First, it involves a convention namely the Barcelona Convention.⁵⁹ The Barcelona Convention enters into the group of *framework conventions*, even it is the first convention that was drafted according to the framework method. That means it is a convention of general scope which proclaims basic principles and involves general articles.⁶⁰ Its provisions are not directly applicable.⁶¹ So, in order to apply precise

⁵⁶ The concept of integrated planning was the product of a holistic vision. The representatives of most of the countries were confused when they first heard that. They were just thinking about cases, effects and simply prevention of pollution. On the other hand, integrated planning was a wider concept concerning both the environment and development. According to this component evaluation of the whole picture is important not only a part of it. The whole picture involves land-use, population movements, littoral economic activities and their effects on marine environment. In littoral regions, urban planners should integrate environmental concerns into planning to eliminate negative effects of economic development on nature. Although the project document of MAP was criticized by representatives because of the complex holistic approach about integrated planning, they were satisfied enough with the components of the Plan. See “Haas, Peter M., **Saving the Mediterranean**, Columbia University Press, New York, 1990, p. 97,98”.

⁵⁷ Haas, Peter M., **Saving the Mediterranean**, Columbia University Press, New York, 1990, p. 97,98.

⁵⁸ **Environmental International Law**, Frequently Asked Questions in International Environmental Law, <http://psclasses.ucdavis.edu/POL-ARCH/pol122-2001-03-spr/SP01/FK/FAQ.html> (Jan. 6, 2007, 20.22).

⁵⁹ See Ibid.

⁶⁰ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p.78 and see also “ Shelton, Dinah; Kiss, Alexandre; **Judicial Handbook on Environmental Law**, UNEP, 2005, p. 16, http://www.unep.org/dpdl/law/PDF/JUDICIAL_HBOOK_ENV_LAW.pdf (Dec. 30, 2006, 17.11)”.

⁶¹ **Law, Policy, Intergovernmental Cooperation**, Analysis of the Council of Europe’s Legal Advice Department and Treaty Office Concerning the Various Possible Forms of the Draft Legally Binding

measures, the states (parties) must either enact national legislation or add protocols to the existing framework convention. In this example, the Barcelona Convention is linked to some Protocols and it obliges its contracting parties to ratify at least one of its protocols.⁶² The detailed obligations related with the Barcelona convention take place in its Protocols.⁶³

Second, the legal structure of MAP or the Barcelona Convention Regime involves the Conference (meeting) of the Parties. The main body of the Barcelona Convention is the Meeting of the Parties. The Parties to the Barcelona Convention meet regularly once every two years in order to evaluate the progress and implementation of the Convention or create amendments and Protocols to the Convention.⁶⁴ The meetings are attended by representatives from non-governmental organizations and UN specialized agencies.⁶⁵ MAP bodies closely interact with these organizations and agencies.⁶⁶

Third, MAP or the Barcelona Convention Regime has a Secretariat (Regional Coordination Unit). That is MAP Coordinating Unit (MEDU) which is the centre of

Instrument on Access to Official Documents,
[http://www.coe.int/t/e/human_rights/cddh/3_committees/05.%20access%20to%20official%20information%20\(dh-s-ac\)/02.%20working%20documents/2006/DH-S-AC\(2006\)003%20E%20Legal%20analysis.asp](http://www.coe.int/t/e/human_rights/cddh/3_committees/05.%20access%20to%20official%20information%20(dh-s-ac)/02.%20working%20documents/2006/DH-S-AC(2006)003%20E%20Legal%20analysis.asp) (Jan 18, 2007, 18.29).

⁶² Birnie, Patricia W. & Boyle, Alan E., **International Law & The Environment**, Clarendon Press-Oxford, New York, 1994, p. 13.

⁶³ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p.78.

⁶⁴ **Environmental International Law**, Frequently Asked Questions in International Environmental Law, <http://psclasses.ucdavis.edu/POL-ARCH/pol122-2001-03-spr/SP01/FK/FAQ.html> (Jan. 6, 2007, 20.22). Moreover, see Article 18 of the Barcelona Convention in “Ibid. p. 46-47” and see “Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published London, 1998, p. 69”.

⁶⁵ Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas; **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**, Ecologic, Institute for International and European Environmental Policy, Berlin, 2002, p. 14,
http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50).

⁶⁶ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 10,11.

MAP activities. It is located in Athens. It is responsible with all secretariat functions, the implementation of the Convention and its Protocols, the diplomatic, political, organisational and financial affairs and public relations.⁶⁷ There is also a rotating ‘Bureau’, which is composed of six representatives of the contracting parties, assists MEDU by giving advisory opinions on MAP in the interim period between meetings of contracting parties.⁶⁸

Moreover, MAP or the Barcelona Convention Regime has some Subsidiary Bodies. These are Regional Activity Centres (RACs) which are coordinated and monitored by MEDU. RACs, based in six Mediterranean Cities, are specialised in different issues. They contribute to the implementation of MAP through assisting the countries. The names of RACs are ‘Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Blue Plan Regional Activity Centre (BP/RAC), Priority Actions Programme Regional Activity Centre (PAP/RAC), Specially Protected Areas Regional Activity Centre (SPA/RAC), Environment Remote Sensing Regional Activity Centre (ERS/RAC) and Cleaner Production Regional Activity Centre (CP/RAC).⁶⁹

In addition to RACs there are two centres⁷⁰ (programs): ‘Programme for the Assessment and Control of Pollution in the Mediterranean Region (MED POL)’, based in Athens at MEDU, which is not only a scientific research tool but also a body assisting the countries on pollution control and ‘Programme for the Protection of Coastal Historic Sites (100 HS)’, based in France in Marseille, which works for the

⁶⁷ Ibid. p. 4.

⁶⁸ **About the MAP, The MAP Structure**, <http://www.unepmap.org/html/homeeng.asp> (Jan. 11, 2007, 18.01).

⁶⁹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 7-9.

⁷⁰ See “Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas, **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**, Ecologic, Institute for International and European Environmental Policy; Berlin, 2002, p. 17, http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50)”.

protection of historic sites.⁷¹ Like RACs, these two centres are supervised and coordinated by MEDU. Both the RACs and these centres are ancillary institutions with different mandates.⁷²

Except these centres, there are some other subsidiary bodies in Barcelona Convention Regime. These are the ‘Mediterranean Commission on Sustainable Development (MCSD)’, “an entity in its own right”, which assists the countries on sustainable development issues⁷³; and ‘National Focal Points (NFPs)’ which are some officials appointed by each country who work for the implementation of MAP at national level.⁷⁴ NFPs meet twice a year and assist the contracting parties about MAP activities. Both the MCSD and NFPs are advisory bodies for contracting parties.⁷⁵

In 1976, the Barcelona Convention Regime or the legal structure of MAP was formed. The Barcelona Convention or the Convention for the Protection of the Mediterranean Sea against pollution was the main legal framework. Moreover, two of its protocols were established simultaneously with the Convention in 1976. These were ‘The Protocol for the Prevention of the Pollution of the Mediterranean Sea by Dumping from ships and Aircraft (the Dumping Protocol)’ and ‘The Protocol Concerning Co-

⁷¹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 6-20.

⁷² Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas, **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**, Ecologic, Institute for International and European Environmental Policy, Berlin, 2002, p. 17,

http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50).

⁷³ **The Mediterranean Commission on Sustainable Development**, UNEP/MAP, Athens, 2001, p. 4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_brochure_eng.pdf (Sep. 26, 2005, 22.15).

⁷⁴ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 4.

⁷⁵ Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas, **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**, Ecologic, Institute for International and European Environmental Policy, Berlin, 2002, p. 14,

http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50).

operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency (the Emergency Protocol)'.⁷⁶

The Barcelona Convention may be called as a 'constitution' for the protection of the Mediterranean marine and coastal environment. The first form of the Convention and its Protocols were ratified by the Contracting Parties⁷⁷ which are Yugoslavia⁷⁸, Turkey, Tunisia, Syria, Spain, Morocco, Monaco, Malta, Libya, Lebanon, Italy, Israel, Greece, France, Egypt, Algeria⁷⁹ and EC⁸⁰ and entered into force in 1978.⁸¹

However, in seventies, the information about environmental pollution and its origins, the Mediterranean ecosystem and the state of Mediterranean environment was limited. Naturally, the quality of the MAP legal documents, which were formed in the

⁷⁶ Kütting, Gabriela, **Environment, Society and International Relations, Towards more effective international environmental agreements**, Taylor and Francis Books Limited, First published, London, 2000, p. 62.

⁷⁷ The signatory countries to the Barcelona Convention, although their welfare conditions are different, aim to protect the Mediterranean voluntarily and actively. Signing and ratifying the legal documents of MAP obliges them to implement appropriate measures for a better Mediterranean environment. Compliance with these legal documents as much as possible is crucial to solve environmental problems. See "**The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 4".

⁷⁸ In 90s, the number of the contracting parties to the Convention increased with the participation of Albania, (and especially after the dispersion of the Yugoslavia with the participation of) Bosnia & Herzegovina, Croatia, Slovenia, Serbia. See the table in "The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols, p. 1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)".

⁷⁹ Talu, Zeynep Aslı, **Saving the Mediterranean: MED Plan and International Cooperation** (M. A. Thesis), Bilkent University, June 1995, p. 42.

⁸⁰ In 1976, the Convention gave a chance to regional economic communities. Regional communities had the right to be a party to the Convention. For this to happen, at least one member of that community had to be a coastal state of the Mediterranean Sea and it had to have a competence in fields covered by the Convention. The European Community, the most important regional economic community, participated in the process as one of the contracting party to the Convention. The EC has contributed much to the construction of MAP process. Four member states of the EC are also parties to the Convention. These are France, Spain, Italy and Greece. Today, some of the Mediterranean countries are going to be members of the Community. See "**The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 10,11". For instance, EC will start the accession negotiations with Turkey after the completion of the scanning process, which has started in 3 October 2005.

⁸¹ **Press Brief, The Barcelona Convention**, Greenpeace, <http://www.greenpeacemed.org/mt/barcon7.html> (Feb. 17, 2006, 19.14).

light of this information, was limited, too.⁸² In practise, the Convention could not be a long-term solution for the degraded state of the Mediterranean Sea. It was not a sufficient legal document. Its text was complex and vague.⁸³

2.2.2 EVOLUTION OF INTERNATIONAL ENVIRONMENTAL LAW AND EVOLVING STRUCTURE OF MAP

In eighties, the evolution of international environmental law continued fast. First, in 1982, World Charter for Nature, ‘a document that is legally non-binding’⁸⁴, is adopted by UN. According to the Charter, nature deserves respect of humanity. Human beings are responsible to protect the nature. Human activities should be consistent with the conservation of nature. Every individual has a right to participate in the decisionmaking process of environmental policy and to apply administrative and legal institutions if he/she complains about environmental problems.⁸⁵ Later, the principle of public information and participation that is mentioned in this charter entered into many international environmental conventions such as the Barcelona Convention.

In addition, the importance of the protection of species for the survival of next generations is stressed on. At this point, the concept of sustainable and balanced development is mentioned in World Charter for Nature.⁸⁶

⁸² Kütting, Gabriela, **Environment, Society and International Relations, Towards more effective international environmental agreements**, Taylor and Francis Books Limited, First published, London, 2000, p. 62.

⁸³ **Press Brief, The Barcelona Convention**, Greenpeace, <http://www.greenpeacemed.org.mt/barcon7.html> (Feb. 17, 2006, 19.14).

⁸⁴ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 98,99.

⁸⁵ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 62.

⁸⁶ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 214.

In 1982, United Nations Convention on the Law of the Sea (UNCLOS), which is one of the most important milestones of environmental law, was opened for signature. It is the most comprehensive environmental treaty with its 320 provisions. It involves articles about protection of living resources, prevention of pollution from different sources and environmental management. Its articles are general which have a constitutional character. It came into force in 1994 and became legally binding.⁸⁷

There are 152 countries that are parties to UNCLOS. Except five countries, all Mediterranean countries, which are also contracting parties to Barcelona Convention, both signed and ratified UNCLOS and become parties to it. However, Libya and Morocco signed UNCLOS but they have not ratified it yet. On the other hand, Turkey, Israel and Syria have not even signed UNCLOS yet.⁸⁸

UNCLOS triggered crucial changes in the international law of the sea. For instance, UNCLOS depends on the fact that pollution of marine environment can not be regarded as a freedom of states. Instead, the control of pollution must be the subject of legal obligations. In order to control and prevent pollution; international environmental cooperation among many states (coastal states, port states, flag states), international organisations and commissions is inevitable that the responsibility of environmental damage must be shared.⁸⁹

UNCLOS stated the concept exclusive economic zone. It gave the coastal states the right to exploit resources in the area extending 200 miles from its shore. Navigation

⁸⁷ Guruswamy, Lakshman D. & Hendricks, Brent R., **International Environmental Law**, West Group, 1st Reprint, USA, 2001, p. 8-10.

⁸⁸ **United Nations Convention on the Law of the Sea**, From Wikipedia, the Free Encyclopedia, http://en.wikipedia.org/wiki/United_Nations_Convention_on_the_Law_of_the_Sea, (Jan. 6, 2007, 20.58). See also “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

⁸⁹ Birnie, Patricia W. & Boyle, Alan E., **International Law & The Environment**, Clarendon Press-Oxford, New York, 1993, p. 253.

through territorial seas and straits of other countries and the right to conduct scientific research are regulated with legal principles.⁹⁰

In sum, UNCLOS balances the interests of states about the management and utilization of the sea. On one hand, states have sovereign rights inside their exclusive economic zones, on the other hand their powers are limited concerning the high seas, the seabed and the ocean floor. International Seabed Authority controls the activities concerning the seabed and the ocean floor.⁹¹

International Seabed Authority⁹² was established in accordance with the related article of UNCLOS.⁹³ It is an international organization that is autonomous.⁹⁴ It has an international legal personality according to article 176 of UNCLOS.⁹⁵ It has its own organs and Secretariat. Its organs are the Assembly, Council, Legal and Technical Commission and Finance Committee. Its Secretariat is located in Kingston, Jamaica. Its main function is to organize the activities of states and administer natural resources concerning the seabed and ocean floor.⁹⁶

The Parties to UNCLOS have some alternatives, if they can not settle peacefully the disputes concerning the application field of UNCLOS. These are the International

⁹⁰ **Oceans and Law of the Sea, The United Nations Convention on the Law of the Sea, A Historical Perspective,**
http://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm,
 (Jan. 6, 2007, 19.49).

⁹¹ Wolfrum, Rüdiger, Law of the Sea: An Example of the Progressive Development of International Law. In: Tomuschat, Christian (Ed.), **The United Nations at Age Fifty, A Legal Perspective,** Kluwer Law International, The Hague, 1995, p. 316.

⁹² See “Sands QC, Philippe, **Principles of International Environmental Law,** Cambridge University Press, Second Edition, Cambridge, 2003, p. 446”.

⁹³ **Oceans and Law of the Sea, The United Nations Convention on the Law of the Sea, A Historical Perspective,**
http://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm,
 (Jan. 6, 2007, 19.49).

⁹⁴ **International Seabed Authority,** <http://www.isa.org.jm/en/default.htm> (Jan 28, 2007, 21.37).

⁹⁵ **United Nations Convention on the Law of the Sea,** p. 95,
http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf (Jan 18, 2007, 18.46).

⁹⁶ **International Seabed Authority,** <http://www.isa.org.jm/en/default.htm> (Jan 28, 2007, 21.37).

Tribunal for the Law of the Sea, the International Court of Justice and arbitral tribunals. The International Tribunal for the Law of the Sea is established by UNCLOS. It is an independent judicial body that deals with the disputes concerning the application field of UNCLOS. It has chambers that are specialized in different subjects such as the Chamber for Marine Environment Disputes or the Seabed Disputes Chamber. It is open not only to States Parties to UNCLOS but also to other natural or legal persons, in certain cases, such as international organizations. It can also deal with the disputes extending the scope of UNCLOS, if another agreement accepts the Tribunal as competent authority.⁹⁷

In 1987, a report which is called 'Our Common Future' (or Brundtland Report) was published by World Environment Development Commission of UN. The report was prepared by environmental law experts. The report is about the legal principles of environmental protection and sustainable development.⁹⁸ Nevertheless, it is not a legally-binding environmental instrument.⁹⁹

It aims to integrate environmental concerns into development sectors. It involves articles about environmental rights and responsibilities of the states. Especially, important legal principles such as the precautionary principle, cooperation and consultation principles are mentioned in the text of the report.¹⁰⁰

In 1992, twenty years after the Stockholm Conference, UN organised an international conference on environment in Rio, UN Conference on Environment and Development. The outputs of that important conference are Rio Declaration, Agenda 21, the Convention on Biodiversity (or Biodiversity Convention), UN Framework

⁹⁷ **General Information-Overview; Introduction, International Tribunal for the Law of the Sea,** http://www.itlos.org/start2_en.html (Jan 28, 2007, 21.48).

⁹⁸ Kuzu, Burhan, **Sağlıklı ve Dengeli Bir Çevrede Yaşama Hakkı**, Fakülteler Matbaası, İstanbul, 1997, p. 171.

⁹⁹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 98,99.

¹⁰⁰ Ibid. p. 215.

Convention on Climate Change (UNFCCC) and Forest Principles which are important documents concerning international environmental law and policy.¹⁰¹

Rio Declaration, Agenda 21 and Forest Principles are soft law documents that are not legally binding.¹⁰² On the other hand, the Convention on Biodiversity and UNFCCC are legally binding documents.¹⁰³

Both the Convention on Biodiversity and UNFCCC were prepared according to the framework method that depends on the Convention-Protocol approach. First, a framework convention is drafted. Later detailed protocols are prepared by the contracting parties during their meetings.¹⁰⁴ So, the obligations of the framework conventions imposed on parties are general and soft. They become specified later with protocols.¹⁰⁵ It is clear that the method of these Conventions is the same as the method of Barcelona Convention which has detailed protocols.¹⁰⁶

The Convention on Biodiversity, which is the first global comprehensive document concerning the flora and fauna on earth, was opened for signature by the UN Conference on Environment and Development and it came into force in 1993. Its main purpose is not only to protect the biological diversity but also to provide the sustainable use of the resources.¹⁰⁷

¹⁰¹ Ibid. p. 215-216.

¹⁰² **International Environmental Law**, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14).

¹⁰³ **Earth Summit**, Background, p. 2, <http://www.un.org/geninfo/bp/envirp2.html> (Dec. 30, 2006, 18.12).

¹⁰⁴ Susskind, Lawrence E., **Environmental Diplomacy, Negotiating More Effective Global Agreements**, Oxford University Press, New York, 1994, p. 30.

¹⁰⁵ Sand, Peter H., **International Environmental Law After Rio**, p. 380, <http://www.ejil.org/journal/Vol4/No3/art4.pdf> (Jan 18, 2007, 18.00).

¹⁰⁶ Birnie, Patricia W. & Boyle, Alan E., **International Law & The Environment**, Clarendon Press-Oxford, New York, 1994, p. 13.

¹⁰⁷ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p. 358.

There are 187 contracting parties to the Convention on Biodiversity from all over the World. The Mediterranean countries that are parties to the Barcelona Convention are also parties to the Convention on Biological Diversity (including EC) except Serbia.¹⁰⁸

A Secretariat was established according to article 24 of the Convention.¹⁰⁹ It is located in Montreal, Canada. Moreover, according to article 25, the Convention has a subsidiary body namely The Subsidiary Body on Scientific, Technical and Technological Advise that gives recommendations to Conference of the Parties concerning the implementation of the Convention.¹¹⁰

The Convention on Biodiversity has a protocol namely Cartagena Protocol on Biosafety. It came into force in 2003.¹¹¹ It regulates the handling, use, transboundary movements and safe transfer of modified organisms which are the products of modern biotechnology.¹¹² There are 130 states that are contracting parties to the Protocol. Majority of the Mediterranean countries that are parties to the Barcelona Convention are also parties to that Protocol. However, some of them are not which are Bosnia & Herzegovina, Israel, Lebanon, Malta, Morocco and Serbia.¹¹³

¹⁰⁸ **UNEP Register of International Environmental Treaties 2005**, p. 478, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37). See also “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

¹⁰⁹ **Convention on Biological Diversity**, 5 June 1992, p. 15, <http://www.biodiv.org/doc/legal/cbd-en.pdf> (Jan 18, 2007, 18.23).

¹¹⁰ **A Brief Introduction to the Convention on Biological Diversity**, <http://www.iisd.ca/biodiv/cbdintro.html> (Jan. 6, 2007, 21.13).

¹¹¹ **UNEP Register of International Environmental Treaties 2005**, p. 688-689, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37).

¹¹² **A Brief Introduction to the Convention on Biological Diversity**, <http://www.iisd.ca/biodiv/cbdintro.html> (Jan. 6, 2007, 21.13).

¹¹³ **UNEP Register of International Environmental Treaties 2005**, p. 689, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37) and see “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

UNFCCC that was opened for signature in 1992 came into force in 1994.¹¹⁴ It aims to reduce the emission rates of greenhouse gases in all over the world.¹¹⁵ Because, high levels of greenhouse gas emissions may threaten sustainable economic development and food production by harming the balance of global climate system.¹¹⁶

There are 188 contracting parties to UNFCCC from all over the world. The Mediterranean countries that are parties to the Barcelona Convention are also parties to UNFCCC including the European Community.¹¹⁷

The supreme body of UNFCCC is the Conference of Parties according to article 7 of the Convention. The Conference of Parties is supported by a secretariat and two subsidiary bodies that are The Subsidiary Body on Scientific and Technical Advice and The Subsidiary Body on Implementation which assist the Conference of Parties by reporting and giving recommendations.¹¹⁸ The Secretariat of UNFCCC is located in Bonn, Germany.¹¹⁹

UNFCCC has a Protocol namely Kyoto Protocol. It came into force in 2005. It deals with the limitation of greenhouse gas emissions according to certain technical levels and timetables. There are 158 states that are contracting parties to the Protocol. Approximately half of the Mediterranean countries that are parties to the Barcelona

¹¹⁴ **UNEP Register of International Environmental Treaties 2005**, p. 468, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37).

¹¹⁵ Kaboğlu, İbrahim, **Çevre Hakkı**, Cep Üniversitesi, İletişim Yayınları, 1. Basım, İstanbul, Ağustos 1992, p. 137,138.

¹¹⁶ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 22,23.

¹¹⁷ **UNEP Register of International Environmental Treaties 2005**, p. 469, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37) and see also “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

¹¹⁸ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 69,70.

¹¹⁹ **UNEP Register of International Environmental Treaties 2005**, p. 476, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37).

Convention are also parties to that Protocol. The Mediterranean countries that are parties to the Kyoto Protocol are Albania, Algeria, Southern Cyprus, European Community, France, Greece, Israel, Italy, Malta, Slovenia and Tunisia.¹²⁰

The declaration on Forest Principles is the first global document concerning the forests. It involves principles about the sustainable management of forests. According to the Declaration; all countries, especially the developed ones, should take the necessary precautions for the conservation and sustainable management of forests and they should allocate specific economic resources for the sustainability of forests.¹²¹

Rio Declaration involves 27 principles on environmental law. The important points of former international environmental law documents were gathered up in this declaration. According to the declaration, the methods of environmental protection should be integrated into the development process. The balance between environment and development is very important. Developing countries should be supported in some ways such as financial aids and technology. States should implement legal, political and scientific measures to prevent environmental problems. Diverse mechanisms of public information and participation should be developed.¹²² The declaration involves the modern principles of environmental law such as the precautionary principle, polluter pays principle and environmental impact assessment.¹²³

Lastly, Agenda 21 is an action plan for the implementation of the principles in the declaration and sustainable development. It has four sections. Section one covers social and economic dimensions of environmental problems such as poverty and

¹²⁰ Ibid. p. 626,627 and see also “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 1, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

¹²¹ **Earth Summit**, Background, p. 2, <http://www.un.org/geninfo/bp/envirp2.html> (Dec. 30, 2006, 18.12).

¹²² Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 216,217.

¹²³ Kuzu, Burhan, **Sağlıklı ve Dengeli Bir Çevrede Yaşama Hakkı**, Fakülteler Matbaası, İstanbul, 1997, p. 93.

consumption patterns. Section two covers the environmental issues such as waste management and freshwater resources. Section three covers the important role of the participation of stakeholders in decisionmaking process such as NGOs and trade unions. The final section covers the financial, institutional and legal dimensions of implementation process.¹²⁴

All these international environmental conferences and documents, formed the legal base and modern principles of environmental law. Naturally, this positive progress of environmental law reflected to existing international initiatives and international legal documents such as the Barcelona Convention and its Protocols.

MAP has evolved since 1975 in the light of global environmental developments. The number and the application field of its legal texts grew. Different pollution sources such as land-based one have been integrated into the protection system of MAP. Now MAP is interested not only in pollution of marine waters but also in pollution transported by rivers. The growing numbers of pollutants have been listed. New standards have been adopted for bathing waters etc. The number of monitoring and research projects about environmental assessment has increased.¹²⁵

Gradually, the relation between the development and the environment has gained importance. The integrated planning component of MAP has been understood well, because unplanned social and economic development triggered environmental problems. That reality changed classical environmental protection approach. The new approach involved not only environmental assessment and protection but also pollution control, integrated coastal zone planning¹²⁶ and management.¹²⁷

¹²⁴ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 22,23.

¹²⁵ Haas, Peter M.; **Saving the Mediterranean**, Columbia University Pres, New York, 1990, p. 97,98

¹²⁶ Integrated coastal zone planning and management is very important for the sustainability of coastal ecosystems. Some kinds of activities like tourism and aquaculture cause damage of ecosystems. The aim is to find environmentally friendly ways of development. For example, hotels should not be built near the nests of seals or high quality waste filter systems should be obligatory for aquaculture plants.

International legal documents such as the Convention on Biological Diversity inspire the MAP authorities. The authorities shape the legal texts of MAP in that way. Recent developments influence the legal texts of MAP. Following the 1992 Rio Conference on environment, texts of MAP have been modernised. New concepts such as precautionary principle have been integrated into MAP.¹²⁸

After twenty years of existence, in 1995, the MAP was revised.¹²⁹ The MAP Phase II was put into action by the contracting parties to the Barcelona Convention at the Conference of Plenipotentiaries held in Barcelona in order to replace the 1975 version of MAP.¹³⁰ The name of revised MAP (or MAP Phase II) is ‘Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean’. This reform movement was a reflection of the MAP’s shortcomings and recent environmental developments such as ‘the United Nations Conference on Environment and Development (Rio de Janeiro, in 1992)’.¹³¹ There are also two annexes of MAP Phase II which are called ‘The Barcelona Resolution’ and ‘Priority Field of Activities until 2005’.¹³² These two documents clarify the general and specific objectives of MAP Phase II.¹³³

¹²⁷ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 125.

¹²⁸ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 4.

¹²⁹ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 125.

¹³⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p.i,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹³¹ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 125.

¹³² **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p.i,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹³³ Ibid. p. 31-34.

Revised MAP or MAP Phase II focuses on the relation between environment and development. Its aim is clear: To take into account environmental concerns in all socio-economic development sectors. It does not aim to hinder the economic growth but to eliminate the growth's negative effects on nature. For this reason, it analyses the present and future conditions of urbanisation, trade, energy use, population etc. and tries to integrate environmental concerns into social and economic policies.¹³⁴

The main objectives of revised MAP (MAP Phase II) are to:

- Ensure sustainable management of natural marine and land resources and integrate the environment in social and economic development and land-use policies;
- protect the marine environment and coastal zones through the prevention of pollution, and by the reduction and, where possible, the elimination of pollutant inputs, whether chronic or accidental;
- protect nature, and protect and enhance sites and landscapes of ecological or cultural value;
- strengthen solidarity among Mediterranean coastal states in managing their common heritage and resources for the benefit of present and future generations;
- contribute to the improvement of the quality of life.¹³⁵

In 1995, under the framework of MAP Phase II and in the light of these objectives, the Contracting Parties amended the text of the Barcelona Convention with new concepts, articles and expressions. For example, the Precautionary Principle was one of them.¹³⁶ Moreover, the geographical coverage of the Convention extended that it

¹³⁴ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontorousis Bros. Graphic Arts, Athens, 2002, p. 3.

¹³⁵ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg; Office for official publications of the European Communities, 1999, p. 125.

¹³⁶ **Press Brief, The Barcelona Convention**, Greenpeace, <http://www.greenpeacemed.org/mt/barcon7.html> (Feb. 17, 2006, 19.14).

now covers all areas of the Mediterranean Sea such as high seas.¹³⁷ The existing protocols of the Convention were updated (amended) and additionally new protocols were adopted.¹³⁸ Most of the global NGOs such as Greenpeace supported the new text of the Convention. They encouraged (today they continue to encourage) the mediterranean countries to ratify the amended text.¹³⁹

Today, revised MAP's legal framework involves the amended Barcelona Convention and its six Protocols which are the Dumping Protocol, the Emergency Protocol, the Land-based Sources (LBS) Protocol, the Specially Protected Areas (SPA) and Biodiversity Protocol, The Offshore Protocol and the Hazardous Wastes Protocol. The Barcelona Convention, Dumping and LBS Protocols were amended¹⁴⁰ and new versions of texts were adopted. However, the only document that entered into force between these three is the new version of the Barcelona Convention. The Emergency and SPA & Biodiversity Protocols¹⁴¹ were replaced by their revised ones and they entered into force. However, the Offshore and Hazardous Wastes Protocols, which were signed in 1994 and 1996, have not entered into force yet.¹⁴²

The MAP legal system includes the instruments below:

¹³⁷ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 11.

¹³⁸ Raftopoulos, Evangelos, "New Era", **Our Planet, The Magazine of UNEP**, Mediterranean Action Plan at 30, UNEP, Nairobi, p. 11, http://www.unep.org/pdf/OurPlanet/op_english_map.pdf (Jan. 9, 2007, 23.41).

¹³⁹ **Press Brief, The Barcelona Convention**, Greenpeace, <http://www.greenpeacemed.org/mt/barcon7.html> (Feb. 17, 2006, 19.14).

¹⁴⁰ According to article 16 of the 1976 Barcelona Convention, in order for amendments to enter into force, three fourths of the contracting parties to that legal text have to submit their instruments of acceptance to the secretariat, i.e. $\frac{3}{4}$ have to ratify. See the Convention in "Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIRESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)".

¹⁴¹ According to article 27/3 of the 1976 Barcelona Convention, if a Protocol is intended to replace by a new one or a new Protocol is adopted, six ratifications are required for the text to enter into force. See Ibid.

¹⁴² **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 3,4 http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

- The main legal instrument is the Barcelona Convention. It was established in 1976 and it is in force since 1978. It was amended in 1995. The full name of the convention after the amendments became ‘the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean’. The amendments are in force since 2004.
- The Protocol for the Prevention of the Pollution of the Mediterranean Sea by Dumping from ships and Aircraft was established in 1976 and it is in force since 1978. It was amended in 1995. After the amendments its name became Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea. However, the amendments are not yet in force.
- The Protocol Concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency was established in 1976 and it is in force since 1978. In 2002, a new Protocol which is called ‘the Protocol Concerning Co-operation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea’ was signed. It is in force since 2004 that replaced the 1976 Emergency Protocol.
- The Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources was established in 1980 and it is in force since 1983. It was amended in 1996. After the amendments its name became ‘the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities’. However, the amendments are not yet in force.
- The Protocol Concerning Mediterranean Specially Protected Areas was established in 1982 and it is in force since 1986. In 1995, a new Protocol was signed which is called ‘the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean’ and the new one replaced the former one. That is in force since 1999.

- The Protocol Concerning Pollution Resulting from Exploration and Exploitation of the Continental Shelf, the Seabed and its Subsoil was signed in 1994. However, it is not yet in force.
- The Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal was signed in 1996. However, it is not yet in force.¹⁴³

¹⁴³ Ibid.

III. INTERNATIONAL ENVIRONMENTAL LAW PRINCIPLES IN REVISED BARCELONA CONVENTION

The revision of the Barcelona Convention that is the main legal framework and its Protocols mean the revision of MAP. New and modern principles were integrated into the Convention's text. Regional and national environmental policies, action plans, scientific projects and management strategies need to be formed in the light of the revised legal framework. The revised text of the Convention has many new principles of modern environmental law. These are sustainable development, the precautionary principle, the polluter pays principle, environmental impact assessment, management of coastal zones and integration principle.

3.1. SUSTAINABLE DEVELOPMENT

Since the 1950s, the rapid and unplanned development and industrialization process have triggered serious environmental problems. Because the limited capacity of natural resources and environmental concerns have been ignored by decisionmakers. For this reason, the principle of sustainable development has been the base of modern legal documents as it depends on the integration of environmental concerns into development process.¹⁴⁴

¹⁴⁴ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 2,3.

3.1.1. HISTORICAL EVOLUTION OF SUSTAINABLE DEVELOPMENT

The perception of sustainable development has become very popular after the Rio summit in 1992. Sustainable development is ‘to respond to the needs of present generations without compromising the needs of future generations’.¹⁴⁵ It depends on setting up a balance between maintaining the development and protection of natural resources. Development sectors must take into account the environmental concerns.¹⁴⁶ For example, hotels must not be built in vulnerable natural habitats.

The concept of sustainable development was first implied in Stockholm Conference, in 1972. The relation between environment and development was mentioned in Stockholm Declaration. According to the declaration, the development depends on the sustainability of natural resources. That perception reflected many principles of the declaration.¹⁴⁷

Later, in 1980, the concept of sustainable development was first mentioned in a report which is called ‘Global 2000’. According to Global 2000, sustainable economical development depends on environment protection, resource management and population control.¹⁴⁸

If 1982 UNCLOS and the revised Barcelona Convention are compared it can be realised that their aims are the same. Both of them oblige the parties to protect the marine environment while they are exploiting the natural resources or developing their economic sectors. Although, the principle of sustainable development was not

¹⁴⁵ **A Constitution for Europe**, Rome 29.10.2004, European Communities, Luxembourg: Office for official Publications of the European Communities, 2004, p. 16.

¹⁴⁶ See “**The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p.13-14”.

¹⁴⁷ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayinevi, 2. Bası, Ankara, Kasım 2001, p. 172-173.

¹⁴⁸ Ibid. p. 74.

mentioned clearly in UNCLOS, articles 192 and 193 together imply the balance between environmental and developmental interests of states.¹⁴⁹

In 1987, the report namely 'Our Common Future' focused on the concept of sustainable development. Sustainable development is defined as 'to satisfy the needs of humanity without jeopardizing the needs of next generations.' According to that report, the protection of environment and development does not contradict with each other. They support each other. Sustainable development involves the sustainability of natural and even cultural richness.¹⁵⁰

The documents of 1992 Rio Conference involve comprehensive explanations about the principle of sustainable development.¹⁵¹ According to the Rio Declaration, protection of natural resources is necessary for the continuance of the development process. The responsibility of developed countries on environmental protection is higher than the developing ones. The states are responsible to form efficient mechanisms of environmental legislation and policy, to decrease high consumption rates, to revise their population policies, to implement the precautionary principle, to cooperate in technology transfer, to respect international law and to support peace.¹⁵² The declaration also involves the principles of environmental impact assessment (EIA) and public participation to the decisionmaking process of environmental policy.¹⁵³

Agenda 21, one of the documents of 1992 Rio Conference, stresses on the responsibility of coastal states to contribute to the sustainable development of the marine environment and coastal areas under their national jurisdiction. It also mentions

¹⁴⁹ Yankov, Alexander, The Law of the Sea Convention and Agenda 21: Marine Environmental Implications. In: Boyle, Alan & Freestone, David (Eds), **International Law and Sustainable Development**, Oxford University Press, First Published, New York, 2001, p. 274.

¹⁵⁰ Keleş, Ruşen & Ertan, Birol; **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 102,103.

¹⁵¹ Turgut, Nükhet; **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 179.

¹⁵² Kuzu, Burhan, **Sağlıklı ve Dengeli Bir Çevrede Yaşama Hakkı**, Fakülteler Matbaası, İstanbul, 1997, p. 284,285.

¹⁵³ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 184.

the importance of logical planning of management that is related with environmental protection of coastal and marine environment.¹⁵⁴

3.1.2. THE PRINCIPLE OF SUSTAINABLE DEVELOPMENT AND MAP

According to article 4/1 of the Convention (revised Barcelona Convention or Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean), the Contracting Parties shall protect the Mediterranean environment to contribute towards its sustainable development. Article 4/2 obliges the parties to implement MAP, to integrate environmental concerns into the development process and to meet the needs of not only present but also the future generations in an equitable manner.¹⁵⁵

To understand the principle of sustainable development better, the concepts, which are sustainability and development, should be explained. First, the concept of development refers not only economic but also social and cultural instruments.¹⁵⁶ For instance; balance of income contribution, cultural and educational levels of people are signs of development level.

Second, the concept of sustainability means the continuance of development process. However, the development process can not exist without natural resources.

¹⁵⁴ Yankov, Alexander, The Law of the Sea Convention and Agenda 21: Marine Environmental Implications. In: Boyle, Alan & Freestone, David (Eds), **International Law and Sustainable Development**, Oxford University Press, First Published, New York, 2001, p. 275.

¹⁵⁵ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 40,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

Sustainable development was implied in the preamble of the 1976 text of the Barcelona Convention. See “**The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**”, UNEP/MAP, Athens, 2002, p. 12”.

¹⁵⁶ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 176,177.

Here, the protection of the environment and logical management of limited resources become important. Therefore, the sustainability, in fact, refers to the sustainability of natural resources, ecosystems and even cultures.¹⁵⁷

Sustainable development depends on a balance between environmental concerns and development concerns. In fact, these concerns complement each other. Development depends on the existence of natural resources. The perception of maximum profit and excessive consumption of natural resources decreases the speed of development in long term. Such a perception of development jeopardises the survival of next generations. Their basic needs such as food, housing and employment should be guaranteed. The concept of social justice, which is the essence of sustainable development, requires that every individual should have average living standards. Individuals from different generations, from different countries, from different regions should have equal opportunities and conditions to benefit from natural resources.¹⁵⁸

As a result, it can be said that the principle of sustainable development has four dimensions: First, states should preserve natural resources for the benefit of not only present generations but also future generations. Second, states should exploit the natural resources in a necessary level (not in an excessive level). Third, states, which exploit natural resources, should take into account the needs of other states and should exploit them in an equitable level. Lastly, states should integrate environmental concerns into development process.¹⁵⁹

It is known that, implementation is not as easy as lawmaking. Unfortunately, in practise, the principle of sustainable development has not worked well especially in the Mediterranean Region. Implementation has been weak. There are some reasons for that

¹⁵⁷ Ibid. p. 177.

¹⁵⁸ Ibid. p. 175-178.

¹⁵⁹ Revesz, Richard L., Sands, Philippe & Steward, Richard B.; **Environmental Law, the Economy, and Sustainable Development**, The United States, the European Union and the International Community; Cambridge University Press, 1st Published, Cambridge, 2000, p. 374,375.

most of which are global. One of the reasons is globalism. The globalism in the last quarter of twentieth and in 21st century encouraged a consumption society. The more people consumed the more they become insensitive to global problems especially environmental problems. The Mediterranean coasts have faced a rapid and cruel development process that has ignored the nature. The recent development process of the Mediterranean has involved negative factors such as limited political will, a lack of funding and public awareness for saving the nature, weak institutional structures, a rush for fast profits, rising consumption patterns, a lack of ecologically sound technologies.¹⁶⁰

The reality is that, the principle of sustainable development is crucial for the Mediterranean coastal and marine environment. The Mediterranean Region has much to gain if the balance exists between the development and the environment. This fact can be easily realised, if one considers the tourism sector.¹⁶¹

Tourism is the most important sector in the coastal areas of the Mediterranean. The first reason for that is the Mediterranean Region's natural beauty. It attracts tourists from all over the world. They come to the Mediterranean region because the seawater is clean, the air is fresh, the weather is sunny, the beaches are unique etc. All these factors prove that if it loses its natural beauty, the tourism sector will lose its economical gains. In recent years unplanned development of tourism has begun to damage the natural resources. Now, the bosses of tourism sector are realising this fact and trying to integrate the development and the environment.¹⁶²

According to article 4/2 of the Convention, the contracting parties shall obey the recommendations of the Mediterranean Commission on Sustainable Development

¹⁶⁰ **The Mediterranean Commission on Sustainable Development**, UNEP/MAP, Athens, 2001, p. 2, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_brochure_eng.pdf (Sep. 26, 2005, 22.15).

¹⁶¹ Ibid.

¹⁶² Ibid.

(MCSO) as much as possible in order to contribute to the sustainable development of the Mediterranean Environment.¹⁶³

The MCSO was set up in 1996. It aims to integrate environmental concerns into the development process throughout the Mediterranean region. It forms some working groups. These groups focus on different specific sustainable development issues. These issues are tourism, water demand management, public participation and awareness-raising, urban development, free trade, industry, agriculture, waste management, governance, local management, international cooperation etc. The groups prepare reports, produce recommendations and projects about their specific issues.¹⁶⁴ They assist the public and private sectors of the Mediterranean countries in that way.¹⁶⁵ These projects and reports are very valuable that the professional experts prepare them. It seems that the MCSO is one of the most important bodies of MAP. It tries to promote the sustainable development of the Mediterranean Sea Area as much as possible.

MAP has a regional activity centre called the Blue Plan Regional Activity Centre, BP/RAC, in Sophia Antipolis (France) that also focuses on the issues of sustainable development. It makes socio-economic analysis of the region and assists the countries about future planning.¹⁶⁶

¹⁶³ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁶⁴ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontourousis Bros. Graphic Arts, Athens, 2002, p. I.

¹⁶⁵ There is also a unit called "The Mediterranean Environment and Development Observatory (MEDO), which was established in order to contribute to a better understanding of the relationship between environment and development and to provide decisionmakers with objective information and data in support of sustainable development in the Mediterranean countries". See "**Turkey's Environment**, REC-The Regional Environmental Center for Central and Eastern Europe, Szentendre/Hungary, May 2002, p. 32, <http://www.rec.org/REC/Programs/ExtensionToTurkey/TurkeysEnvironment.pdf> (Feb. 17, 2006, 19.05)".

¹⁶⁶ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 8.

3.1.3. LEGAL ASPECTS OF SUSTAINABLE DEVELOPMENT AND BARCELONA CONVENTION

In 2002, a world summit on sustainable development, namely the Johannesburg Summit, was organised by UN. The representatives of governments, NGOs, business, local authorities, workers and diverse groups attended the meetings between 2001 and 2002. The recent global issues such as demands for food, water, shelter; conservation of natural resources; economic security were discussed at global level.¹⁶⁷

In Monaco, in 2001, before the Johannesburg Summit, the 21 contracting parties to the Barcelona Convention adopted ‘Mediterranean Declaration for the Johannesburg Summit’¹⁶⁸ (the World Summit on Sustainable Development)’ in their ordinary meeting. Some key legal subjects were adopted for sustainable development¹⁶⁹.

First, under the framework of sustainable development principle, it is better to look at some social subjects concerning directly the daily lives of people in Mediterranean Region. These are *social justice, preventing the gap between rich and poor, both in international, national and regional levels; gender equality, new and modern strategies of communication, public information, education and participation especially in the South*¹⁷⁰:

¹⁶⁷ **Johannesburg Summit 2002**, Basic Information, http://www.johannesburgsummit.org/html/basic_info/basicinfo.html (April 23, 2006, 11.56).

¹⁶⁸ The Declaration is not legally binding. It is a soft law document like Rio Declaration. See “**International Environmental Law**, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14)”. Additionally see “Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayinevi, 1. Baskı, Ankara, Ocak 2002, p. 98-100”.

¹⁶⁹ Fautrier, Bernard, “The Mediterranean, Committed to Sustainable Development”, **MedWaves, The MAP Magazine**, Issue 46, UNEP/MAP, The MAP in Johannesburg,, 2003, Athens, p. 4. http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW46_eng.pdf (Sep. 10, 2005, 18.10).

¹⁷⁰ Ibid.

These subjects make people remember the differences between the contracting parties. There are both developed and developing countries. Political, social, economic conditions are different in France and in Turkey, for instance. These conditions influence their capacity to implement measures for a better environment.

Social injustice, poverty triggers environmental degradation. Poor developing countries and local authorities allocate less money for the environment. Instead, they allocate more for their industrialisation. Environment is not a priority for them. Therefore, the main aim of them is to encourage investments. That means building factories. Factories are built. However, there begin the problems. Because there is not a logical waste management. Therefore, the factories discharge their wastes to rivers and seas without any treatment and harm the balance of nature and the Mediterranean. Consequently, development should be environmentally friendly. At this point, the role of the developed countries is a key role.

Here, a principle of international law related with sustainable development is very important. That is ‘the principle of common but differentiated responsibilities’. Principle 7 of Rio Declaration explains that every state has a responsibility to protect the environment but the degree of its responsibility changes from one to another. The responsibility of the developed countries is higher than the developing ones that they manage international finance and technology and they put a bigger pressure on the environment.¹⁷¹

¹⁷¹ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**, Oxford University Pres, First Published, New York, 2004, p. 133.

The Barcelona Convention, both the old and new versions¹⁷², and the preamble of UNCLOS refer to the special needs of developing countries that are prior to the protection of the environment. According to that approach, the priorities of developing countries such as economic and social development and eradication of poverty should be taken into consideration.¹⁷³ The report that is called Our Common Future states that the concept of sustainable development involves responding to the essential needs of the poor world. This principle, which was reinforced in 2002 World Summit on Sustainable development, is called the principle of equity and the eradication of poverty.¹⁷⁴ Most of the recent conventions adopted that principle such as the 1992 Biodiversity Convention which sees the biological creatures as resources to meet the needs of people.¹⁷⁵

The developed countries should undertake a high responsibility and support the developing ones according to these two principles: Common but differentiated responsibilities and the principle of equity and eradication of poverty. For example, nowadays, the developed countries of EU have decided to contribute 0,7 per cent of their budget to developing countries.¹⁷⁶ However, it is clear that they are so passive. EU limits financial assistance to Turkey during its accession process. This is not a fair

¹⁷² Article 11/3 of the 1976 Convention. See the 1976 text in “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

Article 13/3 of the 1995 Convention. See the 1995 text in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

¹⁷³ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**, Oxford University Pres, First Published, New York, 2004, p. 135.

¹⁷⁴ Ibid. p. 123.

¹⁷⁵ Ibid. p. 131.

¹⁷⁶ **Les dirigeants du monde exhorté a placer le “Capital naturel” au cœur de la lutte contre la pauvreté**, Communiqué de presse du PNUE, Nairobi, Juin 2005, p. 4, <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=434&ArticleID=4819&l=fr> (Feb. 17, 2006, 18.34).

treatment. Of course, the bad reflection of this treatment will show itself in a way on environmental degradation.

Poor developing countries are trying to be a society of industry and trying to leave the traditions of agricultural society. Industrial process also forces them to implement social reforms. Equality between women and men is one of them. Women, who are given opportunities to be policymakers, are actively participating in NGO's about the protection of the environment. Their sensitive characters may be the hope for a better environment.

Communication, public information, education and participation systems are very important. To have a better environment, individuals should be conscious, sensitive and active. Education should give individuals the conscious of the environment, the spirit of struggle for a better environment, the culture of participating in NGO's. Conscious individuals, not only vote in general elections, but also influence environmental policies of the authorities in a positive way by their democratic actions. The developing ones of the contracting parties should maintain their democratisation process decisively.

In addition, the media powers should support the process by their programmes and should make people aware of environmental problems. They should feel the responsibility of influencing masses. Today, not only the national governments, but also mass media governs the countries. They can change national policies; even they can change the governments. So, such an efficient power should be used for the benefits of society and nature.

Nevertheless, unfortunately, most of the mass communication instruments, media organs are under the control of some very rich businesspersons and international trade companies whose benefits may not be in consistence with the nature's. Their main aim is financial gain. They influence masses in parallel with their benefits by television

(TV) channels especially in developing countries where education level is low. Therefore, people, who are addicted to ordinary TV programs that encourage more consumption, become passive individuals and are not interested in politics. They become ordinary and passive citizens of consumer society. They are not sensitive to common problems. All these show the realities of 21st century that the parties should cope with.

The international legal principle of public participation and access to information and justice is a part of the principle of sustainable development. According to the principle, the states are responsible to ensure effective access of people to information held by public and private sectors concerning environmental issues. All persons, especially the vulnerable groups of society such as minorities, poor people and women, should be given chance to participate in decisionmaking mechanisms.¹⁷⁷

That principle is adopted by many international documents. For instance, Brundtland Report states that effective participation of citizens in decisionmaking process is needed to have a logical sustainable development policy.¹⁷⁸ The preamble of 1998 'Aarhus Convention on Access to information, Public Participation in Decision-making and Access to Justice in Environmental Matters' focuses on the access of public to judicial mechanisms in order to defend their legitimate interests on environment.¹⁷⁹

Parallel to the international legal developments, the revised Barcelona Convention involves the principle of public information and participation in article 15. That article obliges the Parties to give citizens access to information on environmental state of the Mediterranean and activities of environmental protection, and to make them

¹⁷⁷ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**; Oxford University Press, First Published, New York, 2004, p. 156.

¹⁷⁸ Ibid. p. 157.

¹⁷⁹ Ibid. p. 160.

participate in decisionmaking processes related with the Mediterranean environment.¹⁸⁰ Articles like that prove the modern character of the revised Barcelona Convention.

There are also some subjects that are more technical than the subjects above concerning the sustainable development. These are *managing water resources and combating pollution including integrated management of water resources, sustainable tourism, clean energy including solar and wind power, clean industrial production*¹⁸¹:

Lebanon and Syria, two of the contracting parties to the Barcelona Convention are at risk. The reason of that risk is possible water stress in less than thirty years. Unless urgent precautions are taken, the effects of the water stress will be very serious¹⁸². The global warming triggers the situation. The coastal regions often face droughts in the summer time. Many Mediterranean countries are in trouble with water scarcity. Available water resources do not respond to the needs of densely populated areas.¹⁸³

According to Principle 21 of the Stockholm Declaration, states are responsible to ensure sustainable use of natural resources although they have sovereign rights over their resources. The duty of states to ensure sustainable use of natural resources is a principle of international environmental law. Shared natural resources such as water should be used in a sustainable manner by a state.¹⁸⁴ If a state overexploits its water

¹⁸⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 45, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁸¹ Fautrier, Bernard, "The Mediterranean, Committed to Sustainable Development", **MedWaves, The MAP Magazine**, Issue 46, UNEP/MAP, The MAP in Johannesburg,, 2003, Athens, p. 4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW46_eng.pdf (Sep. 10, 2005, 18.10).

¹⁸² **MedWaves, The MAP Magazine**, Issue 48-49, UNEP/MAP, Water, Athens, 2003, p. 6.

¹⁸³ **The Mediterranean Commission on Sustainable Development**, UNEP/MAP, Athens, 2001, p. 12, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_brochure_eng.pdf (Sep. 26, 2005, 22.15).

¹⁸⁴ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**, Oxford University Pres, First Published, New York, 2004, p. 109,110.

resources, not only its citizens but also the citizens of neighbour states may face a serious water stress.

Article 4/2 of the revised Barcelona Convention mentions the obligation of the Parties to protect the natural resources of the Mediterranean environment in order to meet the needs of different generations in an equitable manner.¹⁸⁵ This article shows the positive approach of revised MAP that takes into account the principle about sustainable use of natural resources.

According to MCSD, the solution for the water problem is not the developing of water supply alternatives, as the resources are non-renewable. The matter is, basically, control of demand. People need to see the vitality of water. Regional and local authorities should manage demand effectively by implementing political and legal measures. These measures should contain plans to reduce use and misuse of limited water resources.¹⁸⁶

The official authorities can adopt some measures such as charging for use, supply metering, and educating and increasing the awareness of users about water conservation in order to control or reduce demand.¹⁸⁷ For instance, in the agriculture sector in which there are plans to improve the productivity of irrigated areas, the knowledge of farmers are improved about water losses and water allocations of crop

¹⁸⁵ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁸⁶ **The Mediterranean Commission on Sustainable Development**, UNEP/MAP, Athens, 2001, p. 12, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_brochure_eng.pdf (Sep. 26, 2005, 22.15).

¹⁸⁷ Nixon, S.C., Lack, T. C., Lallana, C. & Boschet A. F.; **Sustainable use of Europe's Water?, State Prospects and Issues**, Environmental Assessment Series No:7, European Environment Agency, Copenhagen, 2000, p. 26.

demand are adjusted.¹⁸⁸ For a sound integrated water management these principles are also important:

- Reusing waste water and seawater by the help of high-tech
- Monitoring the quantity and quality of water resources
- Adopting measures about anti-drought and the protection of water resources
- Installing urban sewage treatment systems in lots of Mediterranean coastal cities¹⁸⁹

Tourism is a crucial economic activity in the Mediterranean Region. It contributes much to national income levels of coastal states. However, it is like a double-edged sword. It puts a serious pressure on land and sea, marine resources, historical and natural sites and landscapes, society and local population.¹⁹⁰

In fact, tourism depends on natural and cultural beauties such as unique beaches, blue seas, green forests and historical monuments. Tourists prefer places that have natural beauties and cultural values. This fact explains why the integration of environment and development makes sense. Tourism enterprises should realise the importance of environmental protection for the future of tourism sector. Unplanned development of hotels and holiday villages destroys the natural beauty that beaches and coastal seawater are polluted.¹⁹¹

¹⁸⁸ Lallana C., Krinner W., Estrela T., Nixon S., Leonard J. & Berland J. M., **Sustainable Water Use in Europe, Part 2: Demand Management**, Environment Issue Report No:19, European Environment Agency, Copenhagen, 2001, p. 54.

¹⁸⁹ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 34,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁹⁰ Ibid. p. 5.

¹⁹¹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 33.

For instance, in some parts of Turkey's southern coasts, urbanisation is not environmentally friendly. Coasts are full of buildings. Some of them are hotels and holiday villages and the others are summerhouses. Especially in the summer time overpopulation of these areas influence ecosystems negatively. Many types of rubbish are introduced by people into the marine environment. Auto wheels, chairs, barrels etc.

Building activities disturb animals such as Mediterranean Monk Seals and Caretta Caretta turtles. Seals and turtles leave their living and reproduction places. Almost every summer some parts of the forests are consumed by fires. This leads to increase of erosion. Marinas, which harm the coastline ecosystems, are built.

According to 2002 Johannesburg Declaration on Sustainable Development¹⁹², which is the product of 2002 World Summit on Sustainable Development, states are responsible to strengthen mutually the three dimensions of the sustainable development: social development, economic development and environmental protection. The Principle of Integration and Interrelationship in Relation to Social, economic and environmental objectives is a principle of international law relating to sustainable development.¹⁹³

In parallel with this principle, article 4/2 of the revised Barcelona Convention sees the protection of the environment as an integral part of the development process.¹⁹⁴ Therefore, the Parties to the Barcelona Convention are responsible to ensure both the continuance of the development and environmental protection. That means the

¹⁹² The declaration is not legally binding. See “**International Environmental Law**, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14)”.

¹⁹³ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**, Oxford University Pres, First Published, New York, 2004, p. 103.

¹⁹⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

development should continue in sectors like tourism and industry, however, environmental concerns should be integrated into the activities of these sectors.

Zakynthos island of Greece can be given as an example of positive environmental efforts to eliminate the negative effects of tourism. The beaches of this island contain many turtle nests. After the development of tourism in 80s, these animal's lives were disturbed. NGO's, scientific bodies, environmentalists wanted some precautions for these animals. Pressures were successful and government and the local authorities adopted legal and administrative measures to protect these animals from the effects of vehicles, bathers etc. in 1984.¹⁹⁵

However, the progress level was low. With the recommendations and supports of MAP bodies in the framework of Action Plan for the Conservation of Mediterranean Sea Turtles, Zakynthos was proclaimed as a national marine park on 22 December 1999. An Agency, responsible for the environmental affairs, was set up to manage the park. Even if the results were not very satisfying, progress was made.¹⁹⁶

Tourism can not be considered without a beautiful environment. Tourists want to swim in a clean water, observe creatures under the sea, find a beautiful beach, walk in a big forest, breath fresh air etc. This reality proves the importance of a harmony between tourism and nature. Cooperation among different parts of society is inevitable. Because, their benefits are the same.

Environmentalists love and want to save the nature without any personal benefits. On the other hand the tourism industry, no matter loves or not, is obliged to save the nature for its economic benefits. Governments and local authorities are obliged

¹⁹⁵ Kastelidis, Kostas, "Tourism and Conservation: The Case of Zakynthos", **MedWaves, The MAP Magazine**, Issue 47, Invasive Alien Species, UNEP/MAP, Athens, 2002, p.3,4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW47_eng.pdf (Oct. 5, 2005, 19.00).

¹⁹⁶ Ibid.

to save the nature because of their responsibilities. Their aim is the same: ‘To save and protect the nature’. Therefore, different parts of society should participate in process for a common benefit.

For a sustainable development in tourism sector, these are the principles:

- Taking the environmental concerns into account while monitoring and assessing the development
- Cooperating for a sustainable, environmentally-friendly tourism in regional and international levels
- Using the system of environmental impact assessment
- Training the different actors of the sector especially raising the awareness of tourists about the environmental concerns.¹⁹⁷

The industrial activity is the second most important economic activity after tourism in the Mediterranean Basin that represents 33% of the economy. Naturally, it causes a high level of pollution.¹⁹⁸ In order to have an ecologically sustainable industrial development, a greater integration of industry and environment is necessary, notably via cleaner production.¹⁹⁹

According to article 4/4(b) of the revised Convention, the Parties shall utilize, promote and transfer the types of modern environmentally sound technologies such as

¹⁹⁷ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 5,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

¹⁹⁸ Gallego, José Luis & Villamore, Enrique, “Cleaner Production and the SMEs”, **MedWaves, The MAP Magazine**, Issue 47, Invasive Alien Species, UNEP/MAP, Athens, 2002, p. 16,
http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW47_eng.pdf (Oct. 5, 2005, 19.00).

¹⁹⁹ **MedWaves, The Map Magazine**, Issue 45, Mediterranean Declaration for Johannesburg, UNEP/MAP, Athens, 2002, p. 14,
http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW45_eng.pdf (Oct. 5, 2005, 19.00).

clean production technology for the better implementation of the Convention and the Protocols.²⁰⁰

Cleaner production, which entered into the Convention's text with 1995 amendments, involves the adoption of an integrated environmental protection system to services, processes and products. Its aim is to reduce wastes at source as much as possible through some precautions and internal recycling. For processes, the main points of the strategy are conservation of raw materials, water and energy, the use of alternative energy sources (solar and wind power), the reduction of hazardous raw materials and of the quantity and the potential toxicity of emissions and wastes. For products, it tries to minimise harmful impacts on nature during the product's life cycle from raw material extraction to final disposal. Lastly, for services, it tries to integrate environmental concerns into the design and provision of services.²⁰¹

In 1996, in Barcelona, The Cleaner Production Regional Activity Centre was set up. It aims to develop strategies that eliminate pollution from processes, products and services.²⁰² It supports contracting parties, business enterprises technically for the adoption of less-polluting and more eco-efficient techniques.²⁰³

The programme for the Assessment and Control of pollution in the Mediterranean Region (MED POL), which is under the framework of MAP's scientific component, determined the fragile areas in which industry and the business sectors are main polluters. These sectors are chemical, petrochemical, metallurgical, waste

²⁰⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 42,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²⁰¹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 22.

²⁰² Monfa, Esther, "Industry and Sustainable Development, 'Hand in Hand' ", **MedWaves, The Map Magazine**, Issue 44, UNEP/MAP, Athens, 2001, p.14,
http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW44_eng.pdf (Sep. 26, 2005, 22.15).

²⁰³ **Promoting Cleaner Production in the Industrial Sector**, UNEP/MAP, Barcelona, 2002, p. 20.

treatment, regeneration of solvents, treatment of surfaces, manufacture of paper, paint and plastics, textile dyes, the tanning sector and agro-industry, an activity that is going to increase in the southern countries of the Mediterranean.²⁰⁴

In general, the precautions of the industrial sector are insufficient. More investments are necessary. When compared with larger companies Small and Medium Sized Enterprises does not have a sufficient capacity to overcome environmental concerns. Alternative production processes, which are environmentally friendly, must be adopted.²⁰⁵ At this point, clean energy sources such as solar and wind powers, geothermal energy are important.

Turkey, as a contracting party, has rich clean energy sources. Nevertheless, the usage of them is in low levels.²⁰⁶ A decisive action is necessary to activate clean energy resources not only in Turkey but also in other countries. Unfortunately, global world order does not seem in favour of clean energy. Today, many daily things used by people (such as automobiles) are connected with petroleum. It seems the benefits of global economic actors contradict with the use of alternative energies.

Global actors who are under the control of global companies have power to follow global policies. These policies influence the internal policies of the countries especially developing ones'. For example, railways have not been given necessary importance until now in the framework of Turkey's transport policy except the first years of the Republic. Of course, this is in parallel with the demands of international trade society.

²⁰⁴ Ibid. p. 8.

²⁰⁵ Gallego, José Luis & Villamore, Enrique, "Cleaner Production and the SMEs", **MedWaves, The MAP Magazine**, Issue 47, Invasive Alien Species,,UNEP/MAP, Athens, 2002, p. 16, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW47_eng.pdf (Oct. 5, 2005, 19.00).

²⁰⁶ **Atom Enerjisi ve Alternatif Enerji Kaynakları**, <http://www.geocities.com/iastr/tenerji.htm>.

Some international automobile manufacturers, petroleum tradesmen in cooperation with politicians and with the help of their economic power, may have pressure on governments of the third world countries. Unfortunately, governments, which plan to be authorised by the next election, may count short-term profits and follow populist policies. Today, many countries are obliged to buy petroleum to maintain their industrialisation process, because they do not benefit from their own resources efficiently. These resources include clean energy resources such as wind and solar powers.

If today's world insists not to use clean production methods and clean energy resources, "the global warming" may cause its end. Therefore, MAP bodies should decisively encourage and assist the contracting parties of the Convention especially the Southern ones.

For a sustainable development strategy, these are the main principles in the sectors of industry and energy, which aim cleaner production:

- Encouraging and expanding the usage of cleaner technologies and procedures
- Introducing and developing the programmes that have capacity to overcome industrial pollution
- Encouraging and expanding the usage of renewable sources of energy in public and private sectors
- Introducing and developing new techniques which control and save energy.²⁰⁷

Lastly, there are some administrative subjects concerning the principle of sustainable development. These are *good governance based on effective and*

²⁰⁷ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 4,5,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

*decentralised participative process, an effective mechanism of cooperation, partnership and financing.*²⁰⁸

Chapter XI of Johannesburg Plan of Implementation, one of the outputs of 2002 World Summit on Sustainable Development, states that the countries must strengthen their institutional frameworks by developing necessary infrastructures, by promoting transparency, accountability and fair administrative and judicial institutions, by establishing coordinative institutions in order to implement and enforce laws. These explanations are about the principle of good governance that is an international law principle relating to sustainable development.²⁰⁹

The text of the revised Barcelona Convention does not mention the principle of good governance directly. However, article 15, which is about public information and participation²¹⁰, can be considered under the framework of good governance.

Good governance depends on coordination among MAP bodies, national authorities, local authorities, scientists, NGO's, citizens, businesspersons and all other stakeholders. The responsibility must be shared. Regular meetings must be organised in every country (except the regular meetings of contracting parties in every two years; art. 18 of the Convention). Members of these meetings should involve not only officials but also citizens and the staff of NGO's. Therefore, citizens have the opportunity to share

²⁰⁸ Fautrier, Bernard, "The Mediterranean, Committed to Sustainable Development", **MedWaves, The MAP Magazine**, Issue 46, UNEP/MAP, The MAP in Johannesburg,, 2003, Athens, p. 4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW46_eng.pdf (Sep. 10, 2005, 18.10).

²⁰⁹ Segger, Marie-Claire Cordonnier & Khalfan, Ashfaq, **Sustainable Development Law; Principles Practises and Prospects**, Oxford University Press, First Published, New York, 2004, p. 169.

²¹⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 45, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

their environmental problems with officials and scientists directly as article 15/2 of the Convention requires.²¹¹

For instance, a mayor of a coastal town, as an elected authority, at least should take the recommendations of public into consideration before starting the construction of municipality buildings. This is a sensitive issue concerning the nature. If they are built on green fields or next to the beaches, they may harm the ecosystems.

The financial mechanism of MAP depends on the Mediterranean Trust Fund. Contracting parties contribute that fund in certain levels. Some activities are financed by European Union, UN agencies, and the Global Environment Facility(GEF).²¹² Nevertheless, these are not sufficient. New and additional financial sources and mechanisms (in international and national levels) for sustainable development as well as the Clean Development Mechanisms in the Kyoto Protocol should be adopted.²¹³

MAP works in cooperation with many institutions such as The United Nations Development Programme, The World Health Organisation, The Food and Agriculture Organisation. EU, not only through its Euro-Mediterranean Partnership but also through its signatory status to the Convention, cooperates with MAP bodies on legal and policy aspects of environmental protection.²¹⁴ The partnerships and cooperation²¹⁵ should be

²¹¹ Ibid.

²¹² **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 5.

²¹³ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontourousis Bros. Graphic Arts, Athens, 2002, p. 14 (additional part about Johannesburg Summit).

²¹⁴ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 10.

²¹⁵ Art. 13/1 of the Barcelona Convention : “The Contracting Parties undertake as far as possible to cooperate directly, or when appropriate through competent regional or other international organisations, in the fields of science and technology, and to Exchange data as well as other scientific information for the purpose of this Convention”. See “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 44,45, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

continued rapidly especially on transfer of environmentally sound technologies and scientific knowledge.²¹⁶

There are necessary principles which must be implemented by the contracting parties in order to contribute to the sustainable development of the Mediterranean Basin. These are the precautionary and polluter pays principles, the principle of environmental impact assessment and integrated coastal area management.

²¹⁶ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontorousis Bros. Graphic Arts, Athens, 2002, p. 14 (additional part about Johannesburg Summit).

3.2. THE PRECAUTIONARY PRINCIPLE

According to Principle 15 of the Rio Declaration and article 4/3a²¹⁷ of the revised Barcelona Convention, if there is a serious possibility for an action to harm the environment, the Contracting Parties must take necessary precautions before waiting for the scientific confirmation.²¹⁸ That is called the precautionary principle, which is one of the basic principles of environmental law. Most of the recent environmental legal documents such as the 2000 Cartagena Biosafety Protocol to the Convention on Biological Diversity²¹⁹ involve the principle in order to prevent possible environmental damages.

The precautionary principle has three dimensions which are the damage threat, scientific uncertainty and protective action. There are some conditions concerning these instruments. First, the damage threat must be unreparable that means the reparation of the damage must be impossible. Second, there must be a doubt about the effects of an action on environment. Existence of a doubt concerning the effects of an action legitimates the protective measures.²²⁰

It is better to explain the principle by an example. There is the Great Lakes Region at the border of USA and Canada. Persistent organic compounds have been discharged into the Great Lakes for years. They were threatening the ecosystem. A Joint Commission was established which consists members from USA and Canada. The

²¹⁷ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²¹⁸ Candan, Armağan, **Avrupa Birliği'nin Çevre Politikası, 15 Soruda 15 AB Politikası No:6**, İktisadi Kalkınma Vakfı, İstanbul, Ekim 2003, p. 7.

²¹⁹ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p. 210.

²²⁰ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 98,99.

Commission decided to eliminate all persistent toxic substances in the Great Lakes and stated in the meeting²²¹:

Such a strategy should recognize that all persistent toxic substances are dangerous to the environment, deleterious to the human condition, and can no longer be tolerated in the ecosystem, whether or not unassailable scientific proof of acute or chronic damage is universally accepted.²²²

Application of this principle, which leads to “a reversal of the burden of proof”²²³, is inevitable for the Mediterranean. Especially in overpopulated coastal cities like Antalya where diverse sources of substances are discharged into the marine environment, the precautions must be taken rapidly.

The precautionary principle does not exist in the former text of the Barcelona Convention.²²⁴ Fortunately, it entered into the Convention with 1995 amendments.²²⁵ Application of that principle may prevent possible environmental disasters in Mediterranean environment.

²²¹ Tickner, Joel, Raffensperger, Carolyn & Myers, Nancy, **The Precautionary Principle in Action, A Handbook**, Written to the Science and Environmental Health Network, First Edition, <http://www.mindfully.org/Precaution/Precaution-In-Action-Handbook.htm> (Oct. 24, 2005, 11.58).

²²² Ibid.

²²³ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 12.

²²⁴ See the former text of the Convention in “Environmental Treaties and Resource Indicators (ENTRI) - Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

²²⁵ See the new text of the Convention in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

3.3. THE POLLUTER PAYS PRINCIPLE

The polluter pays principle, one of the principles of international environmental law, aims to impose the costs of pollution on polluters. The concept was first submitted by Organisation of Economic Cooperation and Development (OECD) in order to allocate efficiently the costs of pollution prevention and control measures. In addition, the principle 16 of the Rio Declaration states that in order to internationalize environmental costs, the principle of polluter pays should be applied. The polluter pays principle takes place in many international legal texts such as ‘the Convention on the Protection of the Marine Environment of the Baltic Sea Area’ and ‘1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes’.²²⁶

According to article 4/3b of the revised Barcelona Convention, the Parties are responsible to apply the polluter pays principle which requires to oblige the polluter to pay the costs of pollution prevention, control and reduction measures. That principle entered into the text with 1995 amendments.²²⁷ This is a very positive step that contributes to the reduction of harmful activities on nature. Polluters, who know that they are responsible for the cost of their pollution, try to invent new environmentally friendly techniques, promote their waste management systems. As a result, environmental degradation will be diminished.²²⁸

Fishing activities, for instance, harm the environment in some ways. Anglers use their nets in order to catch fish. During the hunting, some non-targeted species like

²²⁶ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p. 212,213.

²²⁷ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 41, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²²⁸ Candan, Armağan, **Avrupa Birliği’nin Çevre Politikası, 15 Soruda 15 AB Politikası No:6**, İktisadi Kalkınma Vakfı, İstanbul, Ekim 2003, p. 7.

sharks are caught and they die. They throw the dead bodies of the sharks into the sea. Sharks, like other animals, are rings of the ecosystem chain. The break of that ring harms the whole ecosystem.²²⁹ For this reason, anglers must compensate their damage to nature. If laws oblige them to compensate that damage, they will search for new techniques of fishing which prevents non-targeted catch.

In Turkey majority of the aquaculture farms are located in Muğla -a city in the south west corner of Turkey- and nowadays there is a debate between citizens, farm owners and scientists on the harmful effects of these farms on marine ecosystem. Metin Timur, a Professor from İstanbul University Water Products Faculty, claims that the antibiotics used by farmers possibly harm the immunity system of other sea creatures. Moreover, he thinks it is certain that the aquaculture farms pollute the nature; however it is possible to decrease the pollution rate to a minimum acceptable level by the help of technology.²³⁰ As a result, the owners of aquaculture farms in Muğla must take necessary precautions in order to decrease the pollution rate and according to polluter pays principle, they must compensate the damages they make to the marine environment.

²²⁹ Coffey, Clare & Newcombe, Jodi, **The Polluter Pays Principle and Fisheries: The Role of Taxes and Charges**, Institute for European Environmental Policy, London, p. 5, <http://www.jncc.gov.uk/pdf/thepollute2.pdf> (Oct. 24, 2005, 12.30).

²³⁰ **Turizme Açık Yörelerde Kurulan Balık Çiftliklerinin Turizme Verdiği Zarar Hakkında Rapor**, Türkiye Seyahat Acentaları Birliği (TÜRSAB) Ar & Ge Departmanı, Eylül 2001, p. 1,2, <http://www.tursab.org.tr/content/turkish/istatistikler/akrobat/GENEL/01eyBcif.pdf> (March 11, 2007, 20.55).

3.4. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is an objective research which reveals the effects of the initiatives, plans and projects of an institution on environment and determines the alternatives in order to find if the initiatives, plans and projects are acceptable or not.²³¹ EIA aims to make the initiatives, plans and projects environment-friendly or, if that is not possible, to stop the initiatives in order to protect the environment.²³²

EIA began to take place in international law documents in 70s and 80s. Today, it is integrated into most of the international and domestic legal documents. International documents commonly state that countries should take into account the environmental effects of activities before authorizing them. For instance, article 206 of 1982 UNCLOS provides that if states have logical grounds about planned activities which may cause environmental pollution, they shall make researches about the possible effects of these activities on the marine environment and they shall report the results.²³³

New (1995) text of the Barcelona Convention, inspiring from developments of international environmental law, involves the principle of EIA. According to article 4/3c of the revised Barcelona Convention, the Parties shall apply EIA for risky activities which need an authorisation by competent national authorities and which have a potential to harm the marine environment.²³⁴

²³¹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 106.

²³² Ibid. p. 110.

²³³ Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc; Third Edition, Ardsley, 2004, p. 237,238.

²³⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 42.
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

Shortly, in the light of international legal documents including the revised Barcelona Convention, EIA is a kind of a study about the potential effects of an unrealised project (that may belong to public or private sectors) on nature.²³⁵ To understand it better, an example should be given. Let us imagine that a firm from private sector plans to build a factory near the coast. That project, normally, makes people think about the possible effects of it on nature. At this point, an EIA analysis is required. Some questions must be asked. Which substances will the wastes consist? What are the possible effects of these substances on fauna and flora? What is the strategy of waste management? Etc. Consequently, after the possible effects are reported, the authorities will give permission or not about the project.

The countries, which have been applying EIA for years, have prevented many environmental problems.²³⁶ For the protection of the sea and coastal area, all Mediterranean coastal cities must use EIA before realising the projects. These are benefits of EIA:

- Identification of environmental effects clearly
- Incorporation of necessary precautions to the projects
- Identification of good and bad sides of the projects
- Control of the possible effects
- Taking the alternative projects into consideration
- Participation of citizens
- Determination of responsibilities²³⁷

These three principles (precautionary principle, polluter pays principle and EIA) are introduced into the Convention in 1995 under the framework of MAP Phase II.

²³⁵ Candan, Armağan, **Avrupa Birliği'nin Çevre Politikası, 15 Soruda 15 AB Politikası No:6**, İktisadi Kalkınma Vakfı, İstanbul, Ekim 2003, p. 8.

²³⁶ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yaynevi, 2. bası, Ankara, Kasım 2001, p. 527,528.

²³⁷ İdikut, Ayşegül Çil, Increasing Effectiveness of Environmental Management and Planning Strategies for the Coastal Zones of the Mediterranean. In: **The Kriton International Symposium on Environmental Management in the Mediterranean Region**, Volume 1, Boğaziçi University, İstanbul, 1998, p. 188.

3.5. MANAGEMENT OF COASTAL AREAS AND INTEGRATION PRINCIPLE

Socio-economic conditions force people to migrate coastal areas in Mediterranean countries. That leads to a high density of population. Most of the coastal areas (65%) are occupied. For about 6.000 people per kilometre reside in coastal areas. Not only cities and towns enlarge but also new ones appear. The general tendency shows that the population will continue to increase. Consequently, the marine and coastal environment of the Mediterranean is polluted, the resources are deteriorated, and biological richness is endangered. Most of the natural sites, littoral landscapes are not under protection of law. Necessary measures have not been implemented yet in most of the coastal areas.²³⁸

According to article 4/3e of the revised Barcelona Convention, the Parties shall apply and promote the integrated management of the coastal zones (IMCZ), regarding the protection of marine and coastal environment and the rational use of natural resources.²³⁹ The IMCZ is a new concept that does not exist in the 1976 version of the Convention.²⁴⁰ It is among the 1995 amendments.

Integrated Coastal Area Management (ICAM) or IMCZ depends on a holistic approach of environmental issues. The environmental problems in coastal areas are

²³⁸ Trumbic, Ivica, Nouvelle Perspective en Matiere de Gestion Cotiere, **MedOndes, La Revue du Plan D'action pour La Méditerranée**, Numéro 50, Sommet de L'environnement Méditerranéen a Catane, PNUE/PAM, Athènes, 2003, p. 10.

²³⁹ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 42,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²⁴⁰ See "Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN),
http://sedac.ciesin.org/entri/texts/mediterranean_pollution.1976.html (Oct. 13, 2005, 17.41)".

interlinked. Therefore, the solutions will be the result of collective efforts. Collective efforts require the participation of different stakeholders.²⁴¹

For instance, the protection of the turtle nesting grounds depends on the collective efforts of hoteliers, local authorities, tourists and residents. Local authorities implement the rules and sanctions others obey them. Collective efforts may also require the participation of different countries because the origin of an environmental problem may be in a different country. For instance, some rivers pass different countries and reach the sea. Wastes of country A are carried by river and pollute the coastal region of country B. The cooperation is necessary between A and B to solve the problem.²⁴²

The integration principle means the integration of environmental concerns into diverse development sectors such as transport and tourism.²⁴³ The concept of integration, which is a principle of international environmental law, is an instrument of ICAM. As mentioned above, ICAM strategy tries to activate different stakeholders such as hoteliers for the protection of environment. As a result, the managers of other sectors such as hotel managers take environmental concerns into account before making decisions. For instance, they do not build hotels on turtle nesting grounds.²⁴⁴

One of the MAP's regional activity centres, in Split (Croatia), which is called PAP/RAC (Priority Actions Programme Regional Activity Centre), focuses on ICAM. It assists national and local projects to minimise the negative effects of coastal development.²⁴⁵

To overcome pressures on coastal zones some initiatives are realised in the framework of MAP. Coastal Area Management Programmes (CAMPs) are among the

²⁴¹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 28.

²⁴² Ibid.

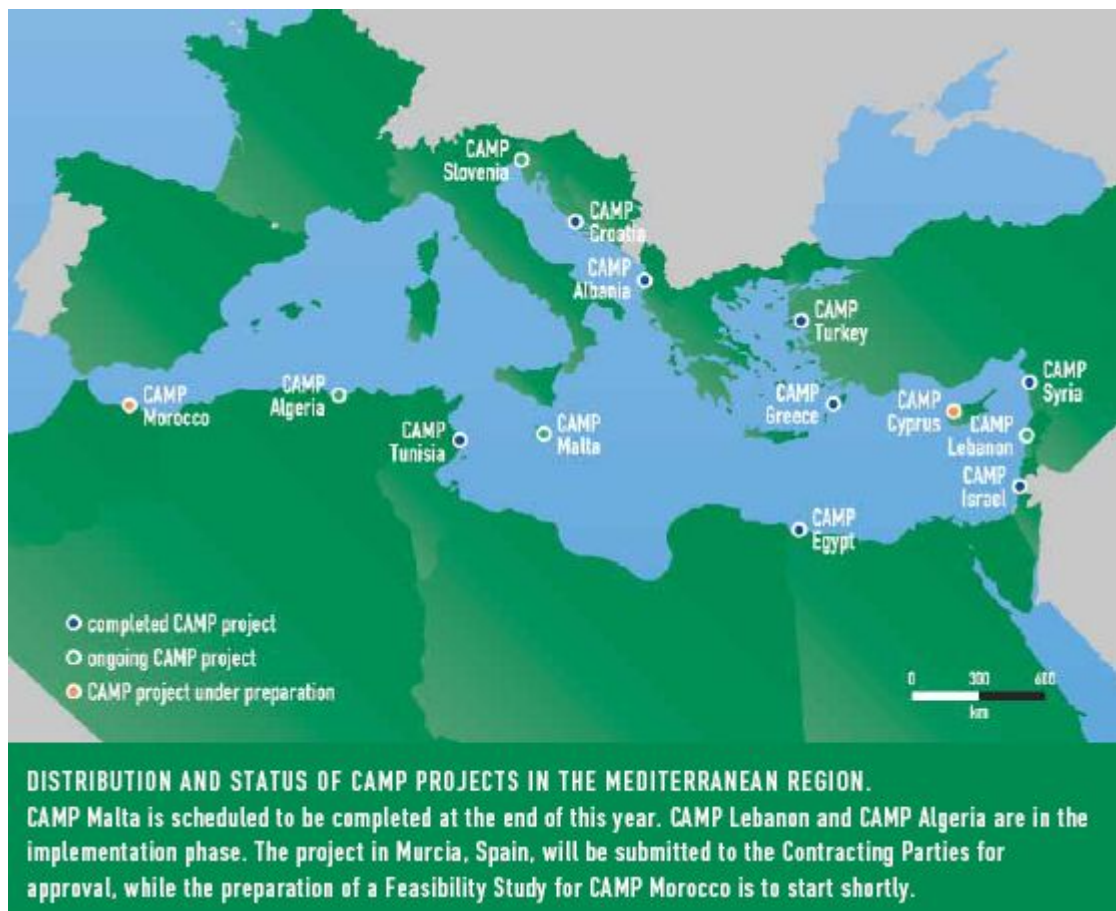
²⁴³ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 100.

²⁴⁴ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 28.

²⁴⁵ Ibid p. 8.

initiatives. The aim of the programmes is to integrate the system of ICAM into national and local levels and to strengthen institutional structure.²⁴⁶

Map 2: The places of CAMP projects in the Mediterranean Region



Source: MedWaves, The MAP Magazine, Issue 47, Invasive Alien Species, UNEP/MAP, Athens, 2002, p. 14,

http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW47_eng.pdf (Oct. 5, 2005, 19.00).

There are many coastal area management projects (CAMPs). Let us look at one of them which is about the bay of İzmir. The scope of the project was the Metropolitan Municipality of İzmir. The programme involved two major phases: first the preliminary,

²⁴⁶ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontorousis Bros. Graphic Arts, Athens, 2002, p. 5.

second the pilot phase and the actual CAMP phase. During the first phase the environmental problems were determined, urgent ones were solved and a basis for the CAMP was established. The product of the first phase was ‘The Integrated Management Study for The Area of İzmir’. That study involved urgent, medium-term measures and a framework for the Integrated Coastal Master Plan. Finally, a land-use plan was developed which was the aim of the CAMP.²⁴⁷

These are the main principles of integrated coastal area management that the Parties should realize:

- Efficient usage of coastal resources
- Protection of biological diversity
- Decrease of bad impacts of urbanisation, tourism, industry, transport, agriculture, aquaculture on coastal nature
- Participation of different stakeholders to the process of environmental management
- Development of human resources and the institutional capacity to deal with environmental problems²⁴⁸

²⁴⁷ **For a Sound Coastal Management in the Mediterranean**, UNEP/MAP, Priority Actions Programme, Jaffra-print, Split, 2002, p. 22.

²⁴⁸ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p.9,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

IV. POLLUTION PREVENTION AND CONSERVATION SYSTEM OF REVISED MAP

The concept of pollution is defined in article 2/a of revised Barcelona Convention²⁴⁹:

‘Pollution’ means the introduction by man, directly or indirectly of substances or energy into the marine environment, including estuaries, which results, or is likely to result, in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of seawater and reduction of amenities.²⁵⁰

One of these effects or an effect like them is enough for an act to be considered as ‘pollution’. For instance, discharge of oil from ships may cause a threat to human and animal health. Some factories, near the rivers, maintain their industrial activities. They generally leave their wastes to the rivers without any necessary treatment. Their wastes reach the sea. The toxic elements of these wastes harm the balance of nature. These elements are absorbed by living marine creatures under the water. They become gradually poisoned. Seabirds and mammals, which consume them, also become poisoned. Moreover, of course, human beings, who consume them, face with health problems.

²⁴⁹ Talu, Zeynep Asli, **Saving the Mediterranean: MED Plan and International Cooperation** (M.A. Thesis), Bilkent University, June 1995, p. 25,26.

²⁵⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 40,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

In 1976 text of Barcelona Convention article 2(a)²⁵¹ was a bit different. Firstly, in 1995 text estuaries are considered in the framework of the marine environment. Therefore, the area which is under protection is expanded.

Secondly, the expression ‘likely to result’ was amended. That means if there is a possibility for a substance or energy to harm to living resources etc. the introduction of it into the marine environment is considered as pollution without waiting its negative results. It is clear that, this amendment is very important. Because, some dangerous chemical substances show their harmful effects on environment lately. In the light of this article, it can be claimed that before introducing substances into the marine environment, some studies are need to be done and some precautions are need to be taken.

Lastly, the expression of ‘marine life’ was amended. That means introduction of substances into the sea must not harm the marine life. It is a wider concept than ‘living resources’. One can harm the rocks underwater by introduction of substances or energy into the sea. It must be considered as pollution. Because the nests of some sea creatures are damaged. That act is a harmful one to marine life. Therefore, it can be said that new form of this article (in 1995 text) is better if the authorities really want to have a better Mediterranean.

²⁵¹ Article 2/a: 'Pollution' means the introduction by man, directly or indirectly, of substances or energy into the marine environment resulting in such deleterious effects as harm to living resources, hazards to human health hindrance to marine activities including fishing, impairment of quality for use of sea water and reduction of amenities. See the 1976 text in “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

The MAP legal framework, the revised Barcelona Convention, involves articles about different pollution sources and conservation of resources like other international legal documents.

4.1. THE PREVENTION OF POLLUTION FROM LAND-BASED SOURCES

Rules regarding the land-based sources of pollution take place in many international instruments. The 1974 Paris Convention, the 1982 UNCLOS, the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), the 1974 and 1992 Baltic Conventions, the 1995 Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA)²⁵² and many other international instruments involve rules about land-based sources of pollution.²⁵³

Article 207 of UNCLOS is about pollution from land-based sources. According to the article, the pollution from land-based sources including rivers, estuaries, pipelines and outfall structures must be prevented, reduced and controlled by states. Moreover, there are some instruments which must be specially considered by states during the process of pollution prevention: international rules, standards, practises and procedures; regional characteristics; special conditions of developing countries; reduction of release of persistent toxic, harmful or noxious substances into the marine environment.²⁵⁴ It is

²⁵² GPA is an action programme which means that is not a legally binding agreement. That is a soft law Document. See “**International Environmental Law**, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14)”.

²⁵³ Sands QC, Philippe, **Principles of International Environmental Law**, Cambridge University Press, Second Edition, Cambridge, 2003, p. 428,429.

²⁵⁴ Ibid. p. 429.

clear that UNCLOS, which is a framework instrument of international environmental law, regulates the subject with a general article.²⁵⁵

According to article 8 of the revised Barcelona Convention, the Contracting parties shall take all appropriate measures to prevent pollution of the sea from land-based sources which originates within the territories of the parties and reaches the sea from outfalls or through coastal disposal, rivers, canals, other watercourses, run-offs and which is transported by the atmosphere. In the article, there is a special reference to the substances which are toxic, persistent and liable to bioaccumulate. Especially, the reduction of these substances is under the responsibility of the Parties.²⁵⁶

The common point of article 207 of UNCLOS and article 8 of revised Barcelona Convention is that they are both general framework articles. They leave details to other complementary legal instruments such as protocols.²⁵⁷ They both consider the interior watercourses such as rivers as land-based sources of pollution. Therefore, the parties of these two conventions are responsible to clean interior waters as these reach the sea. They both specially concern with persistent toxic substances as these have serious harmful effects on marine and coastal environment. The revised Barcelona Convention additionally covers the atmospheric pollution as one of the land-based pollution source. Therefore, it can be claimed that the coverage of article 8 of the revised Convention is wider than article 207 of UNCLOS.²⁵⁸

²⁵⁵ Yankov, Alexander, The Law of the Sea Convention and Agenda 21: Marine Environmental Implications. In: Boyle, Alan & Freestone, David (Eds), **International Law and Sustainable Development**, Oxford University Press, First Published, New York, 2001, p. 281.

²⁵⁶ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 43,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²⁵⁷ Yankov, Alexander, The Law of the Sea Convention and Agenda 21: Marine Environmental Implications. In: Boyle, Alan & Freestone, David (Eds), **International Law and Sustainable Development**, Oxford University Press, First Published, New York, 2001, p. 281.

²⁵⁸ See the information about article 207 of UNCLOS in “Sands QC, Philippe, **Principles of International Environmental Law**, Cambridge University Press, Second Edition, Cambridge, 2003, p. 429” and see article 8 of revised Barcelona Convention in “**Mediterranean Action Plan and**

If the former and new texts of the Barcelona Convention are compared with each other, it is seen that in 1995 text of the Convention, article 8 involves more detail than 1976 text. In 1995 text, the characteristics of some dangerous substances are mentioned. These substances are toxic, persistent and liable to bioaccumulate. Article 8 encourages the parties to adopt measures especially for these kinds of substances. Another important detail is that the atmospheric pollution is also mentioned in the new article. That means it is clearly considered under the framework of land-based sources of pollution.²⁵⁹

There is also another legal document concerning the land-based sources of pollution. The Land Based Sources (LBS) Protocol of the Barcelona Convention, one of the legal documents of the MAP system, aims to reduce pollution from land-based sources by solving the ‘problem of discharges from direct or coastal outfalls and from rivers or other watercourses or run-offs and of atmospheric pollution.’²⁶⁰

Human activities cause high level of pollution of the Mediterranean Sea. The most of these activities appear on land. These activities include urbanism, industry, agriculture etc. In connection with these sectors; municipal, industrial and agricultural wastes,²⁶¹ airborne particles harm the Mediterranean marine environment. Human

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 43, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

²⁵⁹ See Art. 8 in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 43, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

²⁶⁰ Kütting, Gabriela, **Environment Society and International Relations, Towards More Effective International Environmental Agreements**, Taylor and Francis Books Limited, 2000, p. 65.

²⁶¹ These wastes include nutrients, pathogens, heavy metals, persistent organic pollutants, oil and radioactive substances. See “**Reducing Pollution from Land**, UNEP/MAP/GEF, Athens, 2002, p. 3”.

activities also change the coastal habitats physically that leads to degradation of the nature.²⁶²

Urbanisation increases generally in the coastal regions of the Mediterranean countries. Especially during the last century, the coasts of Southern Mediterranean countries and Turkey have urbanized rapidly.²⁶³ Rapid urbanisation in the coastal cities of the Mediterranean causes environmental degradation via municipal wastes. Municipal wastes include solid and liquid wastes.

Sewage, as a kind of liquid waste, harms the coasts and the sea. Around half of the coastal towns need wastewater treatment plants. Without these plants, the wastewater causes a danger for human and animal health, for marine and coastal ecosystems, fishing and recreational activities.²⁶⁴

For instance, sewage is one of the pollutants in İzmir, a coastal city in the west side of Turkey. The sources of the sewage in İzmir are domestic and industrial effluents. It influences bathing water quality, fisheries, human health negatively. Tourism, seafood, recreational amenities, salt production sectors lost financially.²⁶⁵

Household trash, organic waste from food, papers, plastics, bottles are considered in the category of solid wastes. According to researchers, the rate of solid waste is, in average, 254kg per person per year in the Mediterranean region and the rate

²⁶² **Reducing Pollution from Land**, UNEP/MAP/GEF, Athens, 2002, p. 3.

²⁶³ **Urbanisation in the Mediterranean Region from 1950 to 1995**, Blue Plan Papers 1, UNEP/MAP/Plan Bleu, Plan Bleu Centre D'activité Régionale, Sophia Antipolis, 2001, p. 12, http://planbleu.org/publications/cahiers1_urbanisation_uk.pdf (Oct. 13, 2005, 18.41).

²⁶⁴ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 17.

²⁶⁵ **Costs and Benefits of Measures for the Reduction of Degradation of the Environment from Land-Based Sources of Pollution in Coastal Areas**, MAP Technical Reports Series No:72, A. Case Study of the Bay of İzmir, UNEP, Athens, 1993, p. 14, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ALL_LANGUAGES/mts72.pdf (Oct. 28, 2005, 21.27).

continues to increase. Plastic alone constitutes 75% of the pollution on the surface and on seabed. The Mediterranean beaches are full of non-biodegradable plastic wastes²⁶⁶

These are some facts about the solid waste in Mediterranean Region: Rubbish heap is left close to the coast so windstorms carry the rubbish into the marine environment. Disposal sites are generally far from ideal standards. In many cities, recycling is done by private sector. Merely 1-20% of waste is recycled or composted.²⁶⁷

There exist different kinds of industrial activity in the Mediterranean Basin from mining to manufactured products.²⁶⁸ Many examples can be given such as leather industry, pharmaceutical industry, paper industry etc.²⁶⁹

Industrial pollutants pollute the sea through air emissions, solid wastes and wastewaters. Untreated industrial wastewater containing materials such as nutrients, mercury, and chromium enter into the Mediterranean every year. Time-resistant toxic organic substances, Persistent Organic Pollutants (POPs) enter into the rivers through wastewaters. The wastewaters reach and pollute the sea.²⁷⁰ Industrial activities also cause acid rains through their gas emissions. Acid rains harm the ecosystem of the Mediterranean.²⁷¹

There are some positive examples about the implementation of legal measures and reducing the industrial pollution. The municipality of İzmir, for instance, implemented a successful industrial pollution control policy in 1986. It cooperated with

²⁶⁶ **MedWaves, The MAP Magazine**, Issue 52, UNEP/MAP, Athens, p. 12.

²⁶⁷ Ibid.

²⁶⁸ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 64.

²⁶⁹ **Guidelines for the Application of BAT's and BEP's in Industrial Sources of BOD, Nutrients and Suspended Solids for The Mediterranean Region**, MAP Technical Report Series No. 142, UNEP/MAP, Athens, 2004, p. 6.

²⁷⁰ **MedWaves, The MAP Magazine**, Issue 52, UNEP/MAP, Athens, p. 10.

²⁷¹ See "Kütting, Gabriela, **Environment Society and International Relations, Towards More Effective International Environmental Agreements**, Taylor and Francis Books Limited, 2000, p. 114".

private sector. It established an authority that began to monitor the industrial effluents. The quantity of wastewater is accounted. According to quantity of discharged water, companies are obliged to pay a bill. This is the implementation of polluter pays principle in industrial sector.²⁷²

The local authorities of İzmir also encourage companies to relocate from the centre urban areas. They provided financial support for the companies. They exempt the companies, which decide to relocate, from penalties for two years. Recently, 600 companies have started preparations for relocation. Relocated companies have had many benefits. They have increased the production, efficiency and reduced the pollution.²⁷³

Recently, agricultural production has increased in the world because of some factors such as industrial nutrients, fertilizers and irrigation.²⁷⁴ These factors are non-point sources of water pollution.²⁷⁵

In the coastal area of the Mediterranean, especially in the south regions, fertilizers and pesticides are generally used. These harmful substances reach the sea directly through run-off water or indirectly through groundwater and rivers in the form of sediment and chemical loads.²⁷⁶

For instance, nutrient (nitrate and phosphate) is one of the pollutants in İzmir region. One of the sources of that pollutant is agriculture. Nitrate causes eutrophication,

²⁷² **The Environmental Program for the Mediterranean, Preserving a Shared Heritage and Managing a Common Resource**, The World Bank-The European Investment Bank, 1990, p. 57.

²⁷³ Ibid.

²⁷⁴ Kışlalıoğlu, Mine & Berkes, Fikret, **Çevre ve Ekoloji**, Çevre Sorunları, Remzi Kitabevi, İstanbul, 1989, p. 100.

²⁷⁵ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 52.

²⁷⁶ **MedWaves, The MAP Magazine**, Issue 52, UNEP/MAP, Athens, p. 10.

it influences bathing water quality and human health negatively. As a result, a financial loss happens in fisheries, tourism- recreation and salt production sectors.²⁷⁷

To strengthen the legal structure of the protection, the LBS protocol was amended in 1996. First, the 1996 text of the Protocol recognises the objectives of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. The function of that programme is to assist the states in initiating environmental protection measures.²⁷⁸

Second, the amended text enlarges its application field to the ‘hydrologic basin of the Mediterranean Sea Area’. This is a very crucial point. The prevention of pollution at source is the only solution. The source of the pollution may be in a country that is not a party of the Protocol but that source may be inside the hydrologic basin of the Mediterranean Sea Area. At this point, the Parties shall invite the other country to implement the Protocol cooperatively. Lastly, the amended text targets priority the elimination ‘of substances that are toxic, persistent and liable to bioaccumulate’.²⁷⁹

Lastly, to reduce pollution from land, some general principles must be well adopted:

- Using environment-friendly techniques for agricultural activities
- Decreasing the usage of harmful chemicals for water and soil
- Expanding the technology transfer in industry

²⁷⁷ **Costs and Benefits of Measures for the Reduction of Degradation of the Environment from Land-Based Sources of Pollution in Coastal Areas**, MAP Technical Reports Series No:72, A. Case Study of the Bay of İzmir, UNEP, Athens, 1993, p. 14, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ALL_LANGUAGES/mts72.pdf (Oct. 28, 2005, 21.27).

²⁷⁸ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 15,16.

²⁷⁹ Ibid.

- Increasing clean technologies²⁸⁰
- Integration of environmental issues into urban policies and planning such as energy saving, non-polluting forms of transport, creation of town amenities.²⁸¹

4.2. CONSERVATION OF BIOLOGICAL DIVERSITY

There are many international instruments which involve articles about the conservation of biological diversity such as the 1972 Stockholm Declaration, the Convention on the World Cultural and Natural Heritage (1972) and the World Charter for Nature (1982). One of the most important international documents about the topic is 1992 UN Convention on Biological Diversity (CBD). It is an umbrella or framework convention for other particular legal documents which are about certain species, areas. The CBD deals with the protection of species, habitats and ecosystems; the adoption of conservation measures for biological resources; the regulation of biotechnology and the usage of genetic materials.²⁸²

The Barcelona Convention as a regional legal instrument regulates the conservation of biological diversity. According to article 10 of the revised Barcelona Convention, the Contracting Parties are responsible to implement measures in order to protect biological diversity, rare ecosystems, species of wild fauna and flora²⁸³ and their

²⁸⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 4, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²⁸¹ Ibid. p. 6.

²⁸² Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p. 356-358.

²⁸³ Flora involves all living plants in a region, Fauna involves all living animals in a region. See “**Çevre ve Kıyılar**, T.C. Maliye Bakanlığı Milli Emlak Genel Müdürlüğü, Türk Tarih Kurumu Basımevi, Ankara, Ekim 1998, p. 15”.

habitats in the Mediterranean region.²⁸⁴ This article is one of the 1995 amendments that does not exist in the 1976 version of the Convention.²⁸⁵ It is clear that both the CBD and the Barcelona Convention obliges their parties to protect the biological diversity. The main difference here is that the scope of the Barcelona Convention is limited with the boundaries of the Mediterranean environment.²⁸⁶

The complementary legal instrument of Barcelona Convention related with the biodiversity is the Specially Protected Areas (SPA) and Biodiversity Protocol. The SPA and Biodiversity Protocol, one of the legal instruments of the MAP system, aims the conservation of Mediterranean biodiversity and sets out the principles for this aim.

The last form of the Protocol, accepted in 1995, covers not only the territorial sea of the parties but also the high seas. Therefore, the protection of animals such as marine mammals which live in high seas are under the responsibility of the parties.²⁸⁷ That is an important change. Because, Mediterranean ecosystem even the world ecosystem must be considered as a whole. Every creature has a role in an ecosystem. That is similar to the role of a ring in a chain. Even if one ring is lost that means the chain is lost. For instance, whale, as a kind of a mammal, is a ring in the chain of ecosystem. If whales are endangered that means the ecosystem is endangered.

²⁸⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 44, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

²⁸⁵ See “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

²⁸⁶ See article 10 of Barcelona Convention in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 44, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)” and information about CBD in “Kiss, Alexandre & Shelton, Dinah, **International Environmental Law**, Transnational Publishers, Inc, Third Edition, Ardsley, 2004, p. 358”.

²⁸⁷ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 19.

If the CBD and Biodiversity Protocol are compared, it is seen that their objectives and principles are very similar. Their aim is to conserve the biological diversity in global and regional levels. The CBD, normally, covers more issues than the Protocol such as genetic resources on which global consensus is inevitable. Nevertheless, the articles of CBD are framework articles which can be adapted to characteristics of different regions. Consequently, the Protocol can be seen as a legal instrument for implementing the CBD.²⁸⁸

Specially Protected Areas Regional Activity Centre, located in Tunis, aims the protection of species of the Mediterranean nature. It assists the countries about the implementation of the Biodiversity Protocol, determines the sensitive protected areas for urgent action, and initiates action plans for endangered species such as the Mediterranean Monk Seal. It works in cooperation with the NGOs.²⁸⁹

The Mediterranean ecosystem, if its flora and fauna are taken into account, is a unique one that has evolved during millions of years. It not only carries temperate but also subtropical elements. It is a mixture of them. It involves about 10.000 to 12.000 marine species.²⁹⁰ The famous ones are monk seals, turtles, dolphins, posidonia meadows.²⁹¹

Unfortunately, the recent developments normally reflect negatively to the Mediterranean biodiversity. The competition to occupy coastal lands harms the natural habitats. Especially some human activities such as urban development, tourism,

²⁸⁸ **Safeguarding Mediterranean Biodiversity**, UNEP/MAP, Regional Activity Centre for Specially Protected Areas, Tunisia, 2002, p. 10.

²⁸⁹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 8,9.

²⁹⁰ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 110.

²⁹¹ Demetropoulos, Andreas, "Marine Biodiversity should not "need" to be saved", **MedWaves, The MAP Magazine**, Issue 48-49, Water, UNEP/MAP, Athens, 2003, p. 12.

industry, fisheries, agriculture put the biodiversity in danger.²⁹² Endangered species has increased recently. For instance, the monk seal (*Monachus monachus*) – maximum 500 specimens live-, dolphin species (*Delphinus delphis*, *Tursiops truncatus*, *Stenella coeruleoalba*), sperm whales (*Physeter macrocephalus*), and turtles (*Chelonia mydas*, *Trionyx triunguis*, *Caretta caretta*) are under threat.²⁹³

Fishing has been modernised recently. Traditional fishing is being replaced by modern fishing. Some new tools such as winches and fish finders are used. Unfortunately, the catches exceed sustainable fish stocks. Some anglers use illegal techniques and tools such as large trawls. Non-targeted species are caught or harmed.²⁹⁴

The behaviour of an angler from Erdek, a small coastal town in the Marmara Region of Turkey, can be given as an example. He catches some small sharks with the targeted species. These animals are thrown dead into the sea as nobody wants to eat them. Therefore, these creatures, during their infancy, die for nothing.

Invasive alien species are another threat to the Mediterranean biodiversity. Interaction among the countries and continents, the increase of global movements such as international trade, tourism facilitates the introduction of alien species into the Mediterranean environment. Unfortunately, these species, introduced into the Mediterranean, cause not only environmental but also socio-economic problems. The management, control and prevention of them require paying a cost. It is necessary to

²⁹² “During the centuries human beings have harmed the flora and fauna. That has led to a change in climate, soil and water conditions. Once there existed many elephants in Turkey, which were playing in the mud in the wetlands of South-Eastern Anatolia. These wetlands disappeared and the elephants went away. A more recent example can be given which is about a bird. The Amik Lake has been dried for agricultural activities. That has led to the extinction of a bird kind namely Yılanboyun that lived solely in Anatolia”. See “Kışlalıoğlu, Mine & Berkes, Fikret, **Çevre ve Ekoloji**, Çevre Sorunları, Remzi Kitabevi, İstanbul, 1989, s. 218”.

²⁹³ **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p. 18, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/me dttda.pdf> (Sep.13, 2005, 11.31).

²⁹⁴ Demetropoulos, Andreas, “Marine Biodiversity should not “need” to be saved”, **MedWaves, The MAP Magazine**, Issue 48-49, Water, UNEP/MAP, Athens, 2003, p. 12.

implement measures of control because invasive alien species disturb ecological equilibria.²⁹⁵

Some of these species are brought into the Mediterranean by the ballast water of the ships such as *Minemiopsis*-an American comb jelly-, some of them come by way of mariculture introductions such as the Pacific oyster, and some of them come from the Suez Canal that are Indopacific species.²⁹⁶

These species harm the Mediterranean ecosystem and socio-economic structure in different ways. For example *Rhopilema Nomadica*, a kind of jellyfish, disturb tourism by stinging bathers and disturb fisheries by clogging nets. *Caulerpa racemosa*, a kind of a caulerpa, competes with *Cymodocea nodosa*, a kind of a sea grass, which is a feeding place for the green turtles. So, these turtles are affected negatively because of the invasion of *Caulerpa racemosa*.²⁹⁷

Global environmental pressures also reflect to the Mediterranean biodiversity. Climate change, as a global threat, harms the balance of ecosystems and species.²⁹⁸ Climate change affects the marine ecosystems such as the Mediterranean ecosystem by:

- Causing changes in survival, reproductive success, dispersal pattern
- Causing effects which modify biotic interactions
- Affecting ocean currents indirectly.²⁹⁹

²⁹⁵ Demetropoulos, Andreas, "The Story of the Invasive Alien Species", **MedWaves, The MAP Magazine**, Issue 47, Invasive Alien Species, UNEP/MAP, Athens, 2002, p. 6, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW47_eng.pdf (Oct. 5, 2005, 19.00).

²⁹⁶ Ibid p. 7.

²⁹⁷ Ibid p. 8.

²⁹⁸ Rais, Chedly, "Une Stratégie pour la Conservation de la Biodiversité Marine et Cotière", **MedOndes, La Revue du Plan D'action pour La Méditerranée**, Numéro 50, Sommet de L'environnement Méditerranéen a Catane, PNUE/PAM, Athènes, 2003, p. 4.

²⁹⁹ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p 111.

In order to develop the protection of the Mediterranean biodiversity a concept namely Specially Protected Area of Mediterranean Importance (SPAMI) has taken place in Biodiversity Protocol. A SPAMI list is determined.³⁰⁰

SPAMIs are important natural sites about their biodiversities and they have particular interest from all of the Mediterranean countries. There are some criteria such as uniqueness for the selection of these sites. Parties are especially responsible not to harm them. Special conservation measures are applied to the SPAMIs. For example, the sanctuary of the dolphins and the whales, located in the Tyrrhenian-Corsican-Provencal part of the Mediterranean, is now declared as a SPAMI. The sanctuary is in the waters shared by France, Italy and Monaco. There live many species especially dolphins and fin whale.³⁰¹ The particular physical and climatic conditions of the area create complex food chains. The cetaceans are the most important actors in the chain.³⁰²

‘The Strategic Action Programme for the Conservation of the Biological Diversity in the Region’ (SAP BIO) was implemented between 2004 and 2005 by the Mediterranean countries, the relevant intergovernmental and non-governmental organisations. That programme determines the challenges the Mediterranean biodiversity faces such as pollution on biodiversity. Global Environment Facility (GEF) supports the action plan financially.³⁰³

³⁰⁰ **Safeguarding Mediterranean Biodiversity**, UNEP/MAP, Regional Activity Centre for Specially Protected Areas, Tunisia, 2002, p. 15.

³⁰¹ **MedWaves, The Map Magazine**, Issue 45, Mediterranean Declaration for Johannesburg, UNEP/MAP, Athens, 2002, p. 10, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW45_eng.pdf (Oct. 5, 2005, 19.00).

³⁰² Ibid. p. 11.

³⁰³ Rais, Chedly, “A Key Step for Mediterranean Biodiversity”, **MedWaves, The Map Magazine**, Issue 51, Catania Declaration, UNEP/MAP, Athens, p. 13, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW51.pdf (Oct. 5, 2005, 19.30).

In the framework of the MAP, there are some specific action plans for endangered creatures. The most important ones of them are ‘the Action Plan for the management of Mediterranean monk seal’, the Action Plan for the conservation of cetaceans in the Mediterranean Sea’, ‘the Action Plan for the conservation of Mediterranean marine turtles’, and ‘the Action Plan for the conservation of marine vegetation in the Mediterranean Sea’.³⁰⁴

Lastly, these are the common principles, which must integrate into national policies of the Mediterranean countries to protect the biodiversity and nature:

- Development of common resource management in the light of precautionary principle
- Expansion of responsible fishing practises³⁰⁵
- Promotion of measures for the conservation of wetlands
- Integration of efficient national inspection mechanisms
- Implementation of action plans for endangered species³⁰⁶
- Reinforcement of legal structures and measures
- Expansion of international and inter-institutional cooperation³⁰⁷
- Efficient protection of animal rights.

³⁰⁴ Hentati, Mohamed Adel & Nakhla, Lobna Ben; “A Sea with Permanently Endangered Species”, **MedWaves, The MAP Magazine**, Issue 48-49, Water, UNEP/MAP, Athens, 2003, p. 15.

³⁰⁵ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 35,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁰⁶ Ibid. p. 38.

³⁰⁷ Rais, Chedly, “Une Stratégie pour la Conservation de la Biodiversité Marine et Cotière”, **MedOndes, La Revue du Plan D’action pour La Méditerranée**, Numéro 50, Sommet de L’environnement Méditerranéen a Catane, PNUE/PAM, Athènes, 2003, p. 5.

4.3. THE PREVENTION OF SHIP-BASED POLLUTION

There are two main legal documents regulating the ship-based pollution at international level: UNCLOS and International Convention for the Prevention of Pollution from Ships (MARPOL). Article 211 of UNCLOS obliges states to prevent ship-based pollution and to reduce the risk of accidents as much as possible.³⁰⁸

1978 MARPOL (modified form), which is the main international convention related with the subject, involves many specific articles about the elimination of ship-based pollution and control of accidental discharges. The detailed rules are presented in six annexes to the MARPOL.³⁰⁹ These annexes are about oil, noxious liquid substances carried in bulk, harmful substances carried by sea in package form, sewage, garbage and air pollution.³¹⁰

MARPOL (International Convention for the Prevention of Pollution from Ships) is important for the Mediterranean environment as it declares the Mediterranean Sea as a special area. Therefore, the measures concerning the ship-based pollution must be applied strongly for the Mediterranean Sea according to MARPOL.³¹¹

The system of Barcelona Convention is similar to the UNCLOS. It involves some general articles about the subject and leaves the details to its protocols. Article 5, 6 and 9 of the Convention are about ship-based pollution. In the light of the Convention,

³⁰⁸ Sands QC, Philippe, **Principles of International Environmental Law**, Cambridge University Press, Second Edition, Cambridge, 2003, p. 439,440.

³⁰⁹ Ibid.

³¹⁰ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 28.

³¹¹ **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 12.

the common point of these articles is that the parties are responsible to get the ship-based pollution rid of the Mediterranean as much as possible.³¹²

There are two protocols concerning pollution from ships: First the Dumping, second the Emergency Protocol. They are the legal instruments of the MAP system. The first one aims to prevent pollution caused by dumping from ships and aircrafts³¹³, the second one aims to reduce or eliminate pollution resulting from emergencies such as maritime accidents.³¹⁴

Sailing and shipping have been very dominant economic activities for the residents of Mediterranean region since ancient times. Especially maritime trade has gained importance. Traders have preferred waterway for transportation because of its advantages. Ships can carry more goods than caravans. The cost of maritime trade is cheaper. Transport by sea is safer and environmentally friendly.³¹⁵ In general, expansion of transport by sea is in favour of the environment.

There is a density of maritime traffic in the Mediterranean Sea. Some facts explain the density easily. Thirty per cent of all maritime trade happens in

³¹² **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 44,45,

http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³¹³ The Dumping Protocol applies to any deliberate disposal of wastes or other matter from ships or aircraft, with the exception of wastes or other matters deriving from the normal operations of vessels or aircraft and their equipment. See “**The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 14”.

³¹⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 44,45,

http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³¹⁵ **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 4.

Mediterranean Sea. Ships transport 25% of all the sea-transported oil in Mediterranean Sea. Two hundred thousand big tonnage ships cross the Mediterranean Sea annually.³¹⁶

Map 3: Shipping routes in the Mediterranean



Source: MedWaves, *The MAP Magazine*, Issue 44, UNEP/MAP, Athens, 2001, p. 10, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW44_eng.pdf (Sep. 26, 2005, 22.15).

Even if the land-based sources cause more pollution than ship-generated sources, the Mediterranean countries must give big importance to the contribution of ship-generated pollution.³¹⁷ Some 20 % of sea pollution comes from ships.³¹⁸ That is a high rate.

Pollution from ships is divided into two categories by ecologists: the pollution that originates from normal operations and the accidental pollution.³¹⁹

³¹⁶ MedWaves, *The MAP Magazine*, Issue 52, UNEP/MAP, Athens, p. 14.

³¹⁷ Ibid.

³¹⁸ **Shipping and Sea-based Pollution**, UNEP/Regional Seas Programme, <http://www.unep.ch/regionalseas/home/shipping.htm> (Sep. 26, 2005, 22.15).

³¹⁹ Lyras, John, **The Shipping World and Protection of the Sea**, Theme 6-Industrial Impact, p. 1, http://www.rsesymposia.org/files/symposium_2/Shipping_World.pdf (Oct. 28, 2005, 22.45).

Operational pollution from ships is mainly in the form of oil pollution and it is the result of normal-daily operations of ships. Oil pollution ‘includes oil inputs into the sea from cargo and machinery spaces of a ship, comprising oily ballast waters, tank washing residues, fuel oil sludge and machinery space bilge discharges’.³²⁰ For instance, before entering the harbour tankers leave their ballast into the Mediterranean marine environment because in some ports there are no deballasting stations.³²¹ Tankers also cause oil spills during daily operations in ports such as loading, discharging.³²²

Operational pollution from ships causes serious health threats for human beings and other creatures. Diverse kind of birds, fishes, mammals and microscopic creatures die because of that kind of pollution.³²³ Oil pollution also influences the Mediterranean tourism negatively by harming the beauty of the coasts. It harms the fishing activities by not only killing the creatures but also clogging the nets of anglers.³²⁴

Accidental pollution is another form of ship-generated pollution. There are some certain facts about accidental pollution in the Mediterranean Sea. About 60 maritime accidents occur in a year inside the boundaries of the Mediterranean Sea. The results of about 15 accidents are oil and chemical spills in a year. Most of the port cities are at a high risk.³²⁵ Between August 1977 and December 1999, 151 accidents causing oil spills

³²⁰ **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 4.

³²¹ Talu, Zeynep Aslı; **Saving the Mediterranean: MED Plan and International Cooperation** (M.A. Thesis), Bilkent University, June 1995, p. 28,29.

³²² **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 16.

³²³ **Shipping and Sea-based Pollution**, UNEP/Regional Seas Programme, <http://www.unep.ch/regionalseas/home/shipping.htm> (Sep. 26, 2005, 22.15).

³²⁴ Talu, Zeynep Aslı, **Saving the Mediterranean: MED Plan and International Cooperation** (M.A. Thesis), Bilkent University, June 1995, p. 28,29.

³²⁵ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 67.

were registered. During that period a very high rate of local damages occurred. Accidents generally occur near the main sea routes, ports and oil terminals.³²⁶

There are some general types of accidents. A tanker may founder, collide with another one or be stranded. These accidents usually occur near the seaside and harm the beaches and coastal habitats because the chemicals or oil pours down into the sea.³²⁷

There are many examples for maritime accidents³²⁸ in Mediterranean Sea. Haven (1991), Aegean Sea (1992), Sea Empress (1979), Erika (1999) are among the recent ones.³²⁹ Haven, a Greek Cypriot ship, caught fire near Genoa (Italy) on 11 April 1991. Explosions occurred after fire. As a result, “over 10.000 tons of fresh and partly burnt oil were spilled into the sea.”³³⁰

Today, there are many Mediterranean countries, which do not have the necessary capacity to overcome the maritime accidents’ harmful effects. Regional Marine Pollution Emergency Response Centre (REMPEC), one of the regional activity centres of MAP, situated on Malta, helps the countries in that sense under the guidance of emergency protocol. The Centre supports them about contingency planning, development of ports, the training of personnel etc.³³¹ The European Union participates

³²⁶ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 16.

³²⁷ Heatcote, Peter, **Marine Pollution in the Pacific Region-Threats and Responses**, Secretariat of the Pacific Community, Suva, Fiji, October 2001, p. 3,

<http://www.spc.int/Maritime/documents/Marine%20Pollution.pdf> (Oct. 28, 2005, 23.12).

³²⁸ There are some sensitive regions in or near the Mediterranean Sea which have a high potential of maritime accidents because of traffic density such as the straits of Gibraltar, Dardanelle and Bosphorus, Suez Canal. A special attention is needed for these places. See “**MedWaves, The Map Magazine**, Issue 44, UNEP/MAP, Athens, 2001, p.10,11,

http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW44_eng.pdf (Sep. 26, 2005, 22.15)”.

³²⁹ **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 16.

³³⁰ **State and Pressures of the Marine and Coastal Mediterranean Environment**, EEA, Luxembourg: Office for official publications of the European Communities, 1999, p. 68.

³³¹ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 21.

in that process actively by financial supports and scientific studies.³³² Centres like that are, of course, very helpful that they contribute to the environmental protection of the Mediterranean Sea as much as possible.

To provide a better protection for the Mediterranean environment, a Conference of Plenipotentiaries revised the Emergency Protocol in 2002. The text was harmonised with international conventions and inspired from European Community's protection standards about maritime safety and prevention of pollution from ships. It is modernised that now covers prevention, preparedness and response to marine pollution from sea-based sources.³³³ The Protocol approves the role and international initiatives of International Maritime Organisation (IMO) in its preamble. That means it gives reference to global legal initiatives such as MARPOL.³³⁴

On the other hand, the scope of Dumping Protocol and Barcelona Convention expanded with the amendment of 1995. According to article 7 of the new text of the Protocol and article 5 of the revised Barcelona Convention, incineration (combustion of wastes or other matter with the aim of thermal destruction) at sea, is prohibited. Secondly, on the contrary of the previous text, which permitted dumping in principle with some exceptions; new text prohibited the dumping activities in principle.³³⁵

However, the system of 1972 London Convention (Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter) is different. It does not prohibit the dumping activities in principle. In general, it requires a special permit for dumping activities.³³⁶ It is clear that the protection system of Dumping

³³² **Protecting the Mediterranean against Maritime Accidents and Illegal Discharges from Ships**, IMO-UNEP/MAP, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Malta, 2002, p. 15.

³³³ Ibid. p. 26.

³³⁴ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 28.

³³⁵ Ibid. p. 14.

³³⁶ Guruswamy, Lakshman D. & Hendricks, Brent R., **International Environmental Law**, West Group, 1st Reprint, USA, 2001, p. 267,268.

Protocol that prohibits dumping activities in principle is stronger than London Convention.

The modernisation of the protocols' texts is an important progress on environmental protection. However, of course, this is not sufficient. Acceptation and implementation of these texts by the Parties is necessary for concrete developments. The member states need to develop their port reception facilities, national capacities and cooperate for the better implementation of these texts.³³⁷

Lastly, these are the common principles, which the Parties must implement at regional and national levels about the prevention of pollution from ships:

- Development of incentive mechanisms that encourage the countries to implement necessary legal texts
- The establishment of port reception facilities for the wastes of ships such as garbage
- Cooperation among the parties in monitoring pollution from ships
- Financial and technical assistance for the capacity building of contracting parties (especially for developing ones)³³⁸
- The development of emergency mechanisms for maritime accidents such as contingency plans, coordination of mutual assistance³³⁹
- The efficient control of dumping activities and sites.³⁴⁰

³³⁷ **MedWaves, The Map Magazine**, Issue 44, UNEP/MAP, Athens, 2001, p.10, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW44_eng.pdf (Sep. 26, 2005, 22.15).

³³⁸ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 20, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³³⁹ Ibid. p. 21.

³⁴⁰ Ibid. p. 22.

4.4. THE PREVENTION OF POLLUTION FROM HAZARDOUS WASTES

The most famous international legal instrument concerning the subject is the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. It obliges states to minimise the generation and movement of hazardous waste and to dispose the waste as close as possible to its source.³⁴¹ The Basel Convention is in force since 1992.³⁴²

According to article 11 of the revised Barcelona Convention, in parallel with the Basel Convention, the Parties are responsible to prevent the pollution caused by disposal and transfer of hazardous wastes and to reduce transboundary transfer of hazardous wastes as much as possible.³⁴³ This article is one of the 1995 amendments that it does not exist in the 1976 version of the Convention.³⁴⁴ Hazardous Wastes Protocol³⁴⁵, one of the legal documents of MAP, aims to prevent that kind of pollution. However, it is not yet in force.³⁴⁶

Hazardous wastes are toxic substances. They have damaging effects on soil, water, air and, of course, on all living creatures. They may be explosive, flammable,

³⁴¹ Elliott, Lorraine, **The Global Politics of the Environment**, Macmillan Press, 1st Published, London, 1998, p. 47.

³⁴² **UNEP Register of International Environmental Treaties 2005**, p. 398,
http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37).

³⁴³ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, , 2002, p. 44,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁴⁴ See “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN),
<http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

³⁴⁵ See the Contracting Parties to the Protocol in page 134.

³⁴⁶ **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.3,4,
http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

radioactive etc. They can change the natural characteristics of flora and fauna negatively.³⁴⁷

There are diverse sources of hazardous wastes such as industry, agriculture, health care, petroleum, household. Industry is a very important source among them.³⁴⁸ Chemical wastes, oil wastes, metal and plastic wastes etc can be considered as hazardous.³⁴⁹

Hazardous wastes are among the most important environmental problems in Mediterranean region. Illegal dumping of these wastes and mixture of them with municipal waste causes a threat for marine and coastal environment. Especially the region's developing countries face serious environmental risks because of transboundary movements and disposal of hazardous wastes. Unfortunately, majority of these wastes are disposed of inappropriately.³⁵⁰

For example, in Turkey, there is no available data about hazardous waste treatment facilities.³⁵¹ This fact proves the incapacity of Turkey to protect its coastal areas and marine environment to where hazardous wastes reach easily without any treatment.

The legal protection system of Hazardous Wastes Protocol seems better if compared with the Basel Convention (Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; Basel, 1989). First, the

³⁴⁷ **Plan for the Management of Hazardous Waste Including Inventory of Hazardous Waste in the Mediterranean Region**, MAP Technical Report Series No:147, UNEP/MAP, Athens, 2004, p. 27.

³⁴⁸ Ibid. p. 17.

³⁴⁹ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 166, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁵⁰ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 18.

³⁵¹ **Plan for the Management of Hazardous Waste Including Inventory of Hazardous Waste in the Mediterranean Region**, MAP Technical Report Series No:147, UNEP/MAP, Athens, 2004, p. 107.

Hazardous Wastes Protocol covers also radioactive wastes, which the other does not. Second, the Protocol applies also to some products (not for disposal), which are not considered as wastes. That proves the wider scope of the Protocol. Third, the Protocol clearly obliges the state of a foreign ship carrying hazardous wastes, to notify the state of transit. This principle is called 'notification without authorisation'. It depends on the balance between maritime traffic and environmental security of coastal state (state of transit). On one hand, the notification helps the coastal state to take some measures and to be prepared for accidents. On the other hand, the maritime traffic continues without any interruption.³⁵²

This principle seems useful but not sufficient. Ships carrying very dangerous substances (nuclear-powered ships etc.) should be under the active control of coastal state during passing because of risky situation. For example, the ships should follow the most secure routes determined by the coastal state.³⁵³

Lastly, these are the necessary measures, which must be implemented by the Parties to minimise the problem of hazardous wastes:

- Increasing the use of clean production techniques to reduce hazardous wastes
- Assisting the developing countries financially and technically to help them implement the measures, which are in the Hazardous Wastes Protocol.
- Prohibiting the export of hazardous wastes to developing countries.³⁵⁴

³⁵² **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 25, 26.

³⁵³ Ibid p. 26.

³⁵⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 24, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

4.5. THE PREVENTION OF POLLUTION FROM EXPLORATION AND EXPLOITATION OF THE CONTINENTAL SHELF AND THE SEABED AND ITS SUBSOIL

There is not any international legal document concerning only this subject except some regional Protocols. However, UNCLOS regulates the subject with general articles and leaves the details to regional initiatives. According to article 208 of UNCLOS, states are responsible to prevent pollution caused by sea-bed activities and artificial islands, installations and structures within areas of national jurisdiction. Moreover, 1992 OSPAR Convention, which is a regional Convention concerning the marine environment like the Barcelona Convention, obliges its parties³⁵⁵ to prevent pollution from offshore sources and prohibits dumping of wastes from offshore installations.³⁵⁶ It is in force since 1998.³⁵⁷

The Barcelona Convention regulates the subject with a framework article and leaves the details to the Protocol like the UNCLOS. The Offshore Protocol, one of the legal instruments of MAP, reveals the rules to obey in this way. According to article 7 of the revised Convention, the Parties are responsible to prevent that kind of pollution and eliminate it as much as possible.³⁵⁸ The former text of the Convention involves the

³⁵⁵ The Parties to OSPAR Convention are Belgium, Denmark, European Community, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. See “**UNEP Register of International Environmental Treaties 2005**, p. 489, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37)”.

³⁵⁶ Sands QC, Philippe; **Principles of International Environmental Law**, Cambridge University Press, Second Edition, Cambridge, 2003, p. 445-448.

³⁵⁷ **UNEP Register of International Environmental Treaties 2005**, p. 489, http://www.unep.org/dpdl/law/PDF/register_Int_treaties_part2.pdf (Dec. 30, 2006, 17.37).

³⁵⁸ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 43, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

same article.³⁵⁹ However, new text mentions additionally the ‘elimination of pollution as much as possible’.³⁶⁰ That means the new text tries to strengthen the meaning and to oblige the Parties to take efficient measures in order to finish that kind of pollution.

The activities concerning the subject are a serious potential pollution source for the Mediterranean environment. These activities involve ‘exploration, rig construction, drilling mud, water discharge, operational oil discharges, loading and accidents’.³⁶¹ These kinds of operations, especially dredging may affect the fish progeny negatively.³⁶² The dredging operations damage not only the seabed but also the micro-organisms (the food of fishes), the nests and the eggs of fishes.

In order to obey the Offshore Protocol, the Parties shall monitor the activities of the operators. Operators are required having an authorisation from their state to carry out activities. The competent state authority shall take into account the international standards before granting authorisation. The environmental impact assessment must be done. The states shall apply legal sanctions to illegal operators. If an operator causes damage, it must compensate the damage adequately. The activities of the operators must be under insurance cover.³⁶³

Lastly, there are common principles, which must be followed by the Parties to prevent that kind of pollution:

³⁵⁹ See article 7 of former text in “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), http://sedac.ciesin.org/entri/texts/mediterranean_pollution.1976.html (Oct. 13, 2005, 17.41)”.

³⁶⁰ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 43, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02_bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁶¹ Ibid. p. 22.

³⁶² Talu, Zeynep Asli, **Saving the Mediterranean: MED Plan and International Cooperation** (M.A. Thesis), Bilkent University, June 1995, p. 29.

³⁶³ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 23,24.

- Assisting developing countries with equipment and the programmes of personal training
- Adoption of common disposal standards for oils and drilling fluids
- Initiation of research programmes which help reduce the risk of pollution
- Development of efficient monitoring for the operator's activities.³⁶⁴

4.6. CONSERVATION OF CULTURAL HERITAGE

The cultural value of Mediterranean Environment is mentioned in the Preamble to the Convention. MAP aims to protect not only the nature but also the cultural-historical sites from the threats of pollution and uncontrolled urbanisation.³⁶⁵

It is known that, the Mediterranean environment has been a habitat for many civilizations since ancient times such as Anatolian civilizations, Ancient Greek Civilization, Ancient Egypt Civilization, Romans etc. Today, there are historical sites in Mediterranean coasts, involving the rich remnants of these civilizations.

Historical sites, located in coastal areas, are under the threats of nature and humanity. Main natural threats are earthquakes and fires. However, human activities threat these sites much more than natural problems. The rapid urbanisation of coastal places causes the degradation of historical sites. Urban pollution such as air pollution and noise harm the historical sites. The overpopulation of coasts in the summer triggers the degradation. Some parts of these historical sites are underwater. Therefore, human

³⁶⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 23,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁶⁵ **100 Historical Sites Programme Evaluation Report**, UNEP/MAP, Athens, 2001, p. 2,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/01WG190_10_Eng.pdf (Feb. 17, 2006, 18.06).

activities such as dredging and dumping of wastes threaten the remnants. Looting of historical remnants is another human activity that harms the cultural heritage.³⁶⁶

The contracting parties accepted the objective of determination of 100 historic coastal sites in the Genoa Declaration³⁶⁷, in 1985. A list of 100 sites was approved by Parties in 1987.³⁶⁸ They adopted a programme called ‘100 Historic Sites’. There is a Secretariat of the programme in Marseille, Atelier du Patrimoine.³⁶⁹

The determined sites meet certain criteria with their structure of art or architecture and they are important symbols for ancient civilizations.³⁷⁰ For instance, İstanbul and Rome, the cities of Turkey and Italy, involve historical remnants and sites. These large cities are inside the 100 Historic Sites.³⁷¹

MAP experts criticize the Programme for the inefficient results, and they recommend a new strategy that the Programme should be integrated with sustainable development principles.³⁷² To preserve the historical sites better, MAP and national authorities try to integrate historical-cultural concerns into urban use planning and coastal zone management. They adopt some protection measures such as temporary halting of development work upon discovery of antiquities.³⁷³ For example, in 2005, the

³⁶⁶ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 25

³⁶⁷ Genoa Declaration is not a legally binding agreement. It is a soft law document. See “International Environmental Law, Georgetown Law Library, May 2006, <http://www.ll.georgetown.edu/intl/guides/InternationalEnvironmentalLaw.cfm> (Jan. 6, 2007, 19.14)”. Additionally see “Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 98”.

³⁶⁸ **100 Historical Sites Programme Evaluation Report**, UNEP/MAP, Athens, 2001, p. 2, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/01WG190_10_Eng.pdf (Feb. 17, 2006, 18.06).

³⁶⁹ Ibid. p. 1.

³⁷⁰ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 25.

³⁷¹ **100 Historical Sites Programme Evaluation Report**, UNEP/MAP, Athens, 2001, p. 16, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/01WG190_10_Eng.pdf (Feb. 17, 2006, 18.06).

³⁷² Ibid. p. 54.

³⁷³ **The Mediterranean Action Plan**, UNEP, Printed by Dynatics, Athens, August 2000, p. 25.

local authorities stopped the construction of metro in İstanbul when they discovered historical remnants.

V. THE LEGAL AND IMPLEMENTATION PERFORMANCE OF TWO CONTRACTING PARTIES (TURKEY AND EU)

EU and Turkey are two contracting parties to the Barcelona Convention. On one hand, EU represents the industrialized side of the Mediterranean countries; on the other hand Turkey reveals the realities of the developing Mediterranean countries. Moreover nowadays they are negotiating about the membership capacity of Turkey to the EU. So, in order to evaluate the revised MAP well, it is useful to analyse the legal and practical performances of these contracting parties under the framework of modern principles of environmental law that the revised MAP adopted.

5.1. TURKEY

Turkey is one of the contracting parties to the Barcelona Convention. It ratified the 1995 version of the Convention (revised Convention) and the amended versions of Dumping and Land-based Sources Protocols have also been accepted (ratified) by Turkey in 2002. Moreover, it ratified the new SPA & Biodiversity Protocol³⁷⁴ in 2002, the new Emergency Protocol in 2003 and the Hazardous Wastes Protocol³⁷⁵ in 2004. However, it has not ratified the Offshore (has even not signed) Protocol yet.³⁷⁶

³⁷⁴ “Akdeniz’in Deniz Ortamı ve Kıyı Bölgesinin Korunması Sözleşmesi’ne, Akdeniz’de Gemilerden ve Uçaklardan Boşaltma veya Denizde Yakmadan Kaynaklanan Kirliliğin Önlenmesi ve Ortadan Kaldırılması Protokolü’ne, Akdeniz’in Kara Kökenli Kaynaklardan ve Faaliyetlerden Dolayı Kirlenmeye Karşı Korunması Protokolü’ne ve Akdeniz’de Özel Koruma Alanları ve Biyolojik Çeşitliliğe İlişkin Protokol’e” Katılmamız Hakkında Karar

T.C. Resmi Gazete, 22 Ağustos 2002 Perşembe, **Sayı: 24854**, Yürütme ve İdare Bölümü, Milletlerarası Anlaşma, Karar Sayısı 2002/4545.

³⁷⁵ “Akdeniz’de Tehlikeli Atıkların Sınırötesi Hareketleri ve Bertarafından Kaynaklanan Kirliliğin Önlenmesi Protokolünün Onaylanmasının Uygun Bulunduğuna Dair Kanun”

T.C. Resmi Gazete, 9 Aralık 2003 Salı, Sayı: 25311, Yasama Bölümü, Kanunlar, Kanun No. 5007.

³⁷⁶ **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.1,2, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

It seems that Turkey has been decisive about the ratification of the MAP legal documents recently. On the other hand, what about Turkey's marine and coastal environment, especially the Mediterranean part? Is Turkey successful enough at practising sustainable development policy? To respond these questions as much as possible let us have a look at Turkey's marine and coastal environment. First, some general information should be given about Turkey.

Turkey is in the east and north-east side of the Mediterranean Sea. Its area is 779,452 square kilometres. The length of its coasts is 8333 km. It is like a bridge between Europe and Asia that the Bosphorus and the Dardanelles separate two continents. The maritime trade in these straits is dense that approximately 50.000 load ships and tankers pass through them every year.³⁷⁷

Turkey is a peninsula that three sides of it surrounded by seas. The names of these seas are the Black Sea at its north, Aegean at its west and the Mediterranean Sea at its South. It has also an interior sea called Marmara in its north –west. Its climate is generally mild in its coastal parts especially in its Mediterranean and Aegean Regions. The dominant plant kind in these regions is maquis.

It is known that, according to the geographical coverage (art. 2) of the Barcelona Convention, Aegean Sea is considered as a part of the Mediterranean Sea and it is under the protection system of the Convention. Although they are not covered now by the Convention, the Marmara and Black Sea must not be ignored by Turkey, as there are currents between the three seas through the Çanakkale and İstanbul Straits. On the other hand, it is not right to divide the nature into pieces while following the protection policies as earlier or later pollution in a region reflect negatively to the other regions.

Seas are very important especially for the economy of Turkey. Seas contribute to the Turkish economy not only by sea products but also by transportation facilities and

³⁷⁷ Türkiye Ulusal Stratejisi İkinci Uygulama Aşaması, Küresel Çevre Fonu(GEF) Küçük Destek Programı(SGP), p. 4, http://www.gefsgp.net/hakkinda/SGP_CPS_tr_2002.pdf (Jan. 6, 2006, 12.30).

tourism. However, seas are polluted rapidly that even today the divers face with some kinds of fishes very rarely. Unfortunately, the colourful and silent world of the Mediterranean Sea is going to be black and white. Pressures of modern and competitive world reflect also to the coasts and marine life of Turkey. The main factors are clear: Industry, urbanisation, transportation, tourism, non-filtrated wastes etc...³⁷⁸

In parallel with the general tendency in the world, the population density continues to increase in coastal areas of Turkey. The migration triggers urbanisation and industrialisation. A serious pressure on the environment appears. The pressure of industry in the eastern parts of the Mediterranean Region is clearly seen for example. Especially some sectors such as nutrient, petroleum, textile and plastics produce wastes that damage the marine ecosystem. Most of them are located near Mersin and İskenderun.³⁷⁹ Some researches under water reveal large amounts of wastes especially the plastic ones in the Mediterranean Sea. Unfortunately, these plastic wastes, which are swallowed by marine mammals and turtles, harm them seriously. Even the animal may die.³⁸⁰

Tourism is also a big pressure on Turkey's coastal and marine environment especially in the Mediterranean and Aegean Regions. In the summers, large quantities of tourists choose Turkey's many Mediterranean and Aegean towns, cities for holiday. The population doubles. Many hotels, holiday villages, cottages are built for service. These all affect the biological diversity, the quality of marine water negatively.³⁸¹

³⁷⁸ **Su, Türkiye Çevre Atlası**, T.C. Çevre ve Orman Bakanlığı, p. 82, <http://www.cedgm.gov.tr/cevreatlasi/su.pdf> (Jan. 6, 2006, 12.01).

³⁷⁹ **Mavi Bayrak Nedir?**, Yöremizin Durumu, Gıda ve Kontrol Şube Müdürlüğü, <http://www.antalyasm.gov.tr/sube/cevre/mavibayrak/mavibayraknedir.htm> (Jan. 6, 2006, 11.37).

³⁸⁰ **Türkiye Ulusal Biyolojik Çeşitlilik Stratejisi Eylem Planı**, Şubat 2001, p.22, <http://www.bcs.gov.tr/dosyalar/UBCSEP.doc> (Jan. 6, 2006, 11.14).

³⁸¹ **Türkiye'de Çevre Durumu, Türkiye Çevre Atlası**, T.C. Çevre ve Orman Bakanlığı, p. 14, <http://www.cedgm.gov.tr/cevreatlasi/cevredurumu.pdf> (Jan. 6, 2006, 12.10).

Unfortunately, illegal fishing activities are practised in Turkey's coastal regions. In Mediterranean coasts some anglers use dynamite while fishing. Its effects are very serious for biological diversity that it kills every marine organism near the explosion. Dynamite explosions near the habitats of Mediterranean monk seals disturb their lives.³⁸²

Pollution carried by rivers is a danger for the marine environment of all seas surrounding Turkey. Rivers, passing through the industrialised and urbanised areas, carry the industrial, agricultural and household wastes into seawater. These wastes harm the marine ecosystems seriously.³⁸³

³⁸² **Türkiye Ulusal Biyolojik Çeşitlilik Stratejisi Eylem Planı**, Şubat 2001, p. 22, 23, <http://www.bcs.gov.tr/dosyalar/UBCSEP.doc> (Jan. 6, 2006, 11.14).

³⁸³ **Türkiye Ulusal Stratejisi İkinci Uygulama Aşaması, Küresel Çevre Fonu(GEF) Küçük Destek Programı(SGP)**, p. 9, http://www.gefsgp.net/hakkinda/SGP_CPS_tr_2002.pdf (Jan. 6, 2006, 12.30).

Table 2: List of hot spots in Turkey

Name of the pollution hot spot	Type
ICEL	Mixed
ERDEMLI	Mixed
SILIFKE	Domestic
TARSUS	Domestic
ANTALYA	Domestic
ALANYA	Domestic
SIDE	Domestic
MANAVGAT	Domestic
ADANA	Mixed
CEYHAN	Domestic
ANTAKYA	Domestic
ISKENDERUN	Domestic
DORTYOL	Domestic
KIRIKHAN	Domestic
BODRUM	Domestic
MARMARIS	Domestic
DATCA	Domestic
FOCA	Domestic
CESME-ALACATI	Domestic

Source: Transboundary Diagnostic Analysis for the Mediterranean Sea, UNEP/MAP, Athens, 2004, p. 248, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/m edtda.pdf> (Sep.13, 2005, 11.31).

Table 3: List of pollution Sensitive Areas in Turkey

Country	Revised Sensitive Areas	Origin of Pollution	Remedial Action
Turkey	Adana Seyhan River Mouth Ceyhan River Mouth	Heavy pollution load discharged into the Mediterranean Sea	To be identified
	Izmir Bay Bakırçay River Mouth Gediz River Mouth Küçük Menderes River Mouth	Heavy pollution load discharged into the Aegean Sea	To be identified
	İçel Göksu River Mouth Lamas River Mouth Tarsus River Mouth	Heavy pollution load discharged into the Mediterranean Sea	To be identified
	Mersin-Kazanlı	Marine pollution, coastal erosion and breeding dunes for <i>Chelonia mydas</i> and <i>Caretta caretta</i>	To be identified
	Hatay-Samandag	Transboundary marine pollution, especially solid waste, endangered species	To be identified
	Aydın Büyük River Mouth Mugla Dalaman Stream Mouth	Heavy pollution load discharged into the Aegean Sea	

Source: Transboundary Diagnostic Analysis for the Mediterranean Sea, UNEP/MAP, Athens, 2004, p. 252, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/mcdtda.pdf> (Sep.13, 2005, 11.31).

Although they are outside the geographical coverage of the Barcelona Convention, the straits of Çanakkale and İstanbul are crucial for not only the Marmara

and Black Seas but for the Aegean and Mediterranean Seas. The migration of fishes through these straits occurs in certain seasons. These are also very important marine routes for international maritime trade. Thousands of ships pass through them every year. The dense traffic through the straits puts a big pressure on marine environment, of course. Maritime accidents, daily wastes of ships, leakages of petroleum and other hazardous wastes harm the marine environment of Marmara and Black Seas.³⁸⁴

In Turkey under the framework of MAP some positive developments occur. For instance, a national action plan was prepared by TÜBİTAK Marmara Research Centre to reduce land-based sources of pollution. Hot spots and fragile regions are determined in Aegean and Mediterranean Regions. The plan involves pollution data about specific regions. The national targets about pollution rates until 2025 are also explained in the plan.³⁸⁵ Under the framework of national MED-POL (MAP's pollution monitoring program), researches about the pollution of the Mediterranean Sea are done.³⁸⁶

The history of environmental law in Turkey started in 1980s. The Turkish Constitution, adopted in 1982, mentions the right to live in a healthy environment for everyone in article 56. The Constitution also shares the responsibility of protecting the environment between the state and individuals. Moreover, there are other legal documents in Turkish Law that consist articles concerning the environment directly or indirectly such as Coastal Law, Construction Law, Municipality Law, Water Products Law, Forest Law etc.³⁸⁷

³⁸⁴ Kaymaz, Sibel, **Deniz Kirliliği**, <http://www.denizce.com/denizkirli.asp> (Jan. 6, 2006, 11.31).

³⁸⁵ See “**Kara Kökenli Kirliliğin Azaltılması Ulusal Eylem Planı**, T.C. Çevre ve Orman Bakanlığı/TÜBİTAK Marmara Araştırma Merkezi, <http://www.mam.gov.tr/kkkuiep/rapor/Ulusal%20Eylem%20Plan%FD%20Bro%FE%FCr%FC.pdf> (Jan. 6, 2006, 11.42)”.

³⁸⁶ **Su, Türkiye Çevre Atlası**, T.C. Çevre ve Orman Bakanlığı, p. 85, <http://www.cedgm.gov.tr/cevreatlasi/su.pdf> (Jan. 6, 2006, 12.01).

³⁸⁷ See “Erim, Refet, Türkiye’de Yasama-Yürütme ve Yargı’nın Çevre Yaklaşımları. In: Keleş, Ruşen (Ed.), **İnsan Çevre Toplum**; İmge Kitabevi, Ankara, 1992, p. 267”.

11 August 1983 is an important date for the protection of the environment as environmental law was adopted.³⁸⁸ According to article 1, the aim of environmental law is to protect the environment which comprises water, soil, air, natural resources, flora, fauna, natural and cultural richness and to guarantee the welfare of present and future generations. Additionally, the measures taken in order to reach the aim above must be compatible with economic and developmental concerns according to the article.³⁸⁹

Unfortunately, it seems that the article gives priority to developmental concerns as it sees environmental concerns below the developmental ones. It would be better if it involved a balance between environment and development which is the base of sustainable development.³⁹⁰ This text of the article contradicts with international conventions such as the Barcelona Convention that adopts the principle of sustainable development.³⁹¹

Today, Turkish Environmental Law involves some important concepts such as polluter pays principle and environmental impact assessment³⁹², which exist in 1995 version of the Barcelona Convention.³⁹³ Moreover, it mentions elimination of pollution

³⁸⁸ “In line with the environmental law, several regulations have been issued since 1983: Air Quality Control Regulation(1986), Water Pollution Control Regulation(1988), Noise Control Regulation(1986), Control of Solid Waste Regulation(1991), Environmental Impact Assessment Regulation(1992), Regulation on Control of Medical Waste(1993), Control of Toxic Chemical Substances and Products Regulation(1993), Control of Hazardous Wastes Regulation(1993)”. See “**Turkey’s Environment**, REC-The Regional Environmental Center for Central and Eastern Europe, Szentendre/Hungary, May 2002, p. 10, <http://www.rec.org/REC/Programs/ExtensionToTurkey/TurkeysEnvironment.pdf> (Feb. 17, 2006, 19.05)”.

³⁸⁹ Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 275.

³⁹⁰ Ibid.

³⁹¹ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 161.

³⁹² See Çevre Kanunu, md. 3/e, md. 10 in “Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 663-666”.

³⁹³ **Türkiye’de Çevre Durumu, Türkiye Çevre Atlası**, T.C. Çevre ve Orman Bakanlığı, p. 15, <http://www.cedgm.gov.tr/cevreatlasi/cevredurumu.pdf> (Jan. 6, 2006, 12.10).

at source, environmentally friendly technologies, specially protected areas, prevention of chemical wastes.³⁹⁴

Article 3 of the Turkish Environmental Law sets out the general principles concerning the protection of the environment. According to article 3/d, environment-friendly technologies shall be integrated into economic sectors.³⁹⁵ Environment-friendly technologies are under the framework of sustainable development principle and revised Barcelona Convention also involves the same concept in its article 4/4b.³⁹⁶ Moreover, the polluter pays principle, which is an important environmental law principle adopted by the revised Barcelona Convention, takes place in Turkish Environmental Law in article 3/e. According to the article, polluters are obliged to pay the expenses of pollution prevention.³⁹⁷

The title of article 9 is environment protection. 9/3 gives the cabinet the competence to determine specially protected areas like the SPAMIs of the MAP. According to that article, some regions were proclaimed as specially protected areas such as Köyceğiz, Fethiye and Gökova. Special plans and protection strategies are applied in these areas.³⁹⁸

The principle of environmental impact assessment that is one of the principles of MAP is regulated in article 10 of Turkish Environmental Law. According to the article,

³⁹⁴ **Su ve Atıksu Yönetimi**, Alt Komisyon Raporu, İkinci Komisyon, Sürdürülebilir Kalkınma Sürecinde Çevre Yönetimi, T.C. Çevre ve Orman Bakanlığı, Ankara, Şubat 2005, p. 6,7, http://www.cmo.org.tr/yayin/basina/su_atiksu_ak_raporu.doc (Jan. 6, 2006, 12.16).

³⁹⁵ Turgut, Nükhet; **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 663.

³⁹⁶ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p. 42, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

³⁹⁷ Turgut, Nükhet; **Çevre Hukuku**, Savaş Yayınevi, 2. Bası, Ankara, Kasım 2001, p. 663.

³⁹⁸ Güneş, Yusuf; Coşkun, Aynur Aydın; **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 159,160.

institutions, enterprises are obliged to report their environmental impact assessment if their activities potentially threaten the environment.³⁹⁹

Article 30 of Environmental Law gives individuals or institutions the right to complain about activities damaging the nature. They can apply to competent authorities and want them to stop these activities. Here, individual damage is not necessary for complaining. For example, a Turkish citizen lives in Balıkesir, a city in Marmara Region of Turkey. If the citizen hears on radio that some tankers pollute İzmir Bay –a bay in Aegean Region of Turkey-, he/she can apply to competent authorities and want them to stop these tankers. However, in practise the usage of that right is in low levels.⁴⁰⁰ Something goes wrong. Turkey continues to lose its natural beauties, rivers full of chemicals and hazardous wastes pour down into the seas and harm marine ecosystems. Forests and coasts are rapidly urbanised.

Although the Turkish Environmental Law involves some modern principles of international environmental law, it has some deficiencies. First, it has not an effective control mechanism in order to apply preventive measures.⁴⁰¹ Second, Turkish Environmental law is a framework document that leaves the details to the regulations. However, in practise, regulations delay, they have articles incompatible with the Environmental Law and they leave wide competence to elected administration as the ministry of environment has the competence to enact regulations on environmental protection. Therefore, problems arise.⁴⁰² In practice, the regulations enacted by ministry of environment which is a political institution may not be consistent with the needs of

³⁹⁹ Turgut, Nükhet, **Çevre Hukuku**, Savaş Yayınevi, 2. bası, Ankara, Kasım 2001, p. 666.

⁴⁰⁰ Ural, Engin, “Çevre Hakkı”, **Yeşilatlas Dergisi**, p. 97, http://www.yesilatlas.com/apps/usermmt.app/download.php/YSLATLAS/01YES96_97.pdf.pdf (Feb. 14, 2006, 19.35).

⁴⁰¹ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 160.

⁴⁰² Keleş, Ruşen & Ertan, Birol, **Çevre Hukukuna Giriş**, İmge Yayınevi, 1. Baskı, Ankara, Ocak 2002, p. 276-285.

the society concerning the environment as the ministry may take into consideration the benefits of some groups that are politically close to the cabinet.

In fact, adoption of even the best laws may not be a solution to save the nature. Turkey needs an efficient sustainable development policy that involves rational communication, information and education strategies. Public awareness about the importance of the environment is crucial. However, to wake the people up and to activate them about environmental concerns is not an easy work. The social structure of Turkey is enough to prove that.

There are clear differences between rich and poor about the living standards. A small minority gain the majority of the national income. Especially people living in rural districts become poorer day by day. That triggers the villagers to migrate the big cities to own better conditions to live. Overpopulation of these cities causes environmental problems that the number of green places decreases in city centres, substructure services become insufficient.⁴⁰³

The educational level of citizens reveals that the majority of the population is not well educated. Sixty two per cent of total population have maximum primary school diploma. Unemployment rate is high especially in urbanised regions that it is approximately 10%.⁴⁰⁴

Reading (books, newspapers etc.) rates are low in general. However, watching TV is the most favourite leisure activity among Turkish families. If these social facts of Turkey are taken into account, it can be said that to make people aware of environmental problems, public and private institutions especially the mass media should participate actively in the process. However, the majority of TV channels

⁴⁰³ Türkiye Ulusal Stratejisi İkinci Uygulama Aşaması, Küresel Çevre Fonu(GEF) Küçük Destek Programı(SGP), p. 5, http://www.gefsgp.net/hakkinda/SGP_CPS_tr_2002.pdf (Jan. 6, 2006, 12.35).

⁴⁰⁴ Ibid.

broadcast ordinary programmes that aim to increase the consumption instead of cultural, educational, documentary programmes. Unfortunately, individuals are under control of a unique culture imposed by international global companies that influence the policies of third world.⁴⁰⁵

Individuals are addicted to ordinary TV programs that encourage more consumption. They do not know anything about green policies or drought problems but they continue to consume more. It is not logical to wait the reaction of the masses about environmental problems in Turkey. For this to happen, citizens should have a radical change in mentality. Both the citizens and public, private sectors in Turkey are responsible for this change. Especially state authorities and powerful private holdings, which have TV channels, are determinants of the process. Unfortunately, public awareness about the environment depends on prime time TV programmes in Turkey.

If private TV channels come together and start a campaign called ‘save the nature’, certainly, it would be very effective. For instance, let us imagine that all TV channels broadcast the same documentary about the environment in prime time and at the same time every week in a certain day. The uneducated family members would certainly prefer watching the documentary to other activities such as reading a book.

If the same policy continues for a few weeks, a change would start in people’s minds. A few months later, it would be possible to see cleaner parks, seas, forests. The members of NGOs would increase. Citizens would react decisively to environmental problems etc. If a TV film can cause murders or determine fashion and lifestyles, it can also increase the respect for the environment. This is an imaginary example that makes people consider about the power of TV or the power of media.

⁴⁰⁵ See “Demirer, Göksel N., **2020 Yılında Dünya’da ve Türkiye’de Çevre**, p. 7-9, http://www.ttb.org.tr/2020/goksel_demirer.doc (Jan. 6, 2006, 12.20)”.

Turkey has always needed a long term, consistent and modern environmental policy. A solid perception of liberalism prevents the state from following decisive, restorative or preventive environmental policies. However, the perception of modern welfare state requires some precautionary policies to protect nature, human health and cultural-historical richness. The perception of welfare state sometimes legitimizes some necessary restrictions on social and economic life and even on individual lives. The aim of these restrictions is the conservation of nature, history and public health. If Turkey aims to be a modern welfare state, the governments should follow decisive, right and long-term environmental policies consistent with Turkish laws.⁴⁰⁶

Some institutional problems hinder the national authorities to follow efficient environmental policies. The problem of ‘competence’ is one of the most important ones. In Turkey, not only the ministry of environment but also some other ministries are competent about environmental issues. These are Industry and Trade ministry, Agricultural and Rural Affairs Ministry, Health Ministry, Culture and Tourism Ministry etc. These ministries also have competence to take some decisions concerning the environment. Moreover, the local authorities participate in the process of policymaking. In practise problems arise about competence and this leads to a loss of sanction power of Environmental Ministry.⁴⁰⁷ As a result, environmental regulations are not enforced well. There are some sanctions in environmental regulations such as fines and penalties but they are not applied effectively.⁴⁰⁸

In Turkey, the environmental monitoring or inspection is inefficient. That is why Turkey faces serious environmental problems. Central and local institutions of state are

⁴⁰⁶ Keleş, Ruşen & Hamamcı, Can, **Çevrebilim**, İmge Kitabevi, Ankara, 1993, p. 251.

⁴⁰⁷ **Su ve Atıksu Yönetimi**, Alt Komisyon Raporu, İkinci Komisyon, Sürdürülebilir Kalkınma Sürecinde Çevre Yönetimi, T.C. Çevre ve Orman Bakanlığı, Ankara, Şubat 2005, p. 7, http://www.cmo.org.tr/yayin/basina/su_atıksu_ak_raporu.doc (Jan. 6, 2006, 12.16).

⁴⁰⁸ **Turkey's Environment**, REC-The Regional Environmental Center for Central and Eastern Europe, Szentendre/Hungary, May 2002, p. 38, <http://www.rec.org/REC/Programs/ExtensionToTurkey/TurkeysEnvironment.pdf> (Feb. 17, 2006, 19.05).

responsible to do the monitoring. On one hand, at the centre, the ministry can not be an active determinant of monitoring policies. On the other hand, local state authorities and municipalities have no enough capacity to do this or their responsibilities are not clear.⁴⁰⁹

Some measures should be taken for the marine and coastal environment of Turkey. These are the priorities:

- Turkey should sign and ratify the Offshore Protocol immediately
- The responsibilities and competences of public institutions related with the environment should be clarified and their financial, administrative, technical capacities should be increased⁴¹⁰
- Marine pollution monitoring centres should be established with academic support
- Marmara Sea should not be ignored that a specific action plan should be done for it
- The local authorities should be encouraged for environmental projects such as amelioration of river basins
- Media, especially TV channels should work actively by initiating useful programmes and campaigns to increase respect for the environment
- The environment should be a lesson in primary schools such as geography or history
- The opinions and recommendations of NGOs such as Greenpeace should be taken into consideration by state authorities.⁴¹¹

⁴⁰⁹ Talu, Nuran, **Reform Çevreden Çok Uzak**, E-mektup Arşivi-Yorum, Radikal İnternet Baskısı, 27 Kasım 2003,

<http://www.radikal.com.tr/haber.php?haberno=96953> (Jan. 5, 2006, 18.20).

⁴¹⁰ **IV. Çevre Şurası Sonuç Raporları**, Çevre Bakanlığı, İzmir, 6-8 Kasım 2000, p. 9

<http://vizyon2023.tubitak.gov.tr/teknolojiongorusu/paneller/cevresururulebilirlikalkinma/kaynaklar/komrap.pdf> (Jan. 6, 2006, 12.22).

⁴¹¹ Ibid.

5.2. EUROPEAN UNION

Some of EU member countries are contracting parties to the Barcelona Convention which are Spain, Italy, France, Malta, Greece, Slovenia, Croatia and (Southern) Cyprus.⁴¹² However, EU, as a supranational Union, is also a contracting party to the Convention as the 1976 Barcelona Convention gave regional economic groupings the chance to be a party to the Convention.⁴¹³

EU ratified the revised Barcelona Convention in 1999. It also ratified the amended Dumping, Land Based Sources Protocols and the new SPA & Biodiversity, Emergency Protocols. Nevertheless, it has even not signed the Offshore and Hazardous Wastes Protocols.⁴¹⁴ In the light of this information, the legal and implementation performance of EU on environmental protection will be evaluated.

EU Environmental Law has evolved in some phases. First term is between 1957-1973; second term, which involves three action programs, is between 1973-1986, fourth action program is between 1987-1992 and fifth action program is between 1993-2000. After 1973, the sensitiveness about the environment increased. Between 1982 and 1986, under the framework of third action program; the integration of environmental concerns into other community policies, environmental impact assessment, clean technologies and the problem of transboundary pollution were focused on.⁴¹⁵

⁴¹² **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p.254,
<http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/metadata.pdf> (Sep.13, 2005, 11.31).

⁴¹³ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 10,11.

⁴¹⁴ **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.1-2,
http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

⁴¹⁵ Keleş, Ruşen & Hamamcı, Can, **Çevrebilim**, İmge Kitabevi, Ankara, 1993, p. 230,231.

Between 1987 and 1992, under the framework of fourth action program, environmental concerns were integrated into other policies such as industry, agriculture and tourism. Between 1972 and 1992, many regulations and directives were enacted most of which are about the protection water, air and soil. Between 1993 and 2000, under the framework of fifth action program, the principle of sustainable development was adapted to the law of EU. For instance, clean technology and waste management were integrated into industry.⁴¹⁶

Article 130r (now article 174) of the EC Treaty reveals the objectives of EU on environment.⁴¹⁷ These involve the protection and improvement of the quality of the environment, the protection of human health, sustainability of natural resources, promotion of measures in order to prevent environmental problems.⁴¹⁸

To reach the objectives above, EU adopted some principles which are legal principles of international environmental law. According to second pharagraph of 130r (article 175 of Amsterdam Treaty), these are the precautionary, the prevention at source, the polluter pays and the integration principles most of which take place in the revised Barcelona Convention.⁴¹⁹ Moreover, the principle of sustainable development is the base of EU law and policy.⁴²⁰

EU law involves horizontal regulations and directives which are not about specific subjects such as air and water. However, they are applicable to all specific

⁴¹⁶ Ibid.

⁴¹⁷ Kramer, Ludwig, **EC Treaty and Environmental Law**, Sweet & Maxwell Limited, Third Edition, London, 1998, p. 54.

⁴¹⁸ Jans, Jan, Objectives and Principles of EC Environmental Law. In: Winter, Gerd (Ed.), **European Environmental Law, A Comparative Perspective**; Dartmouth Publishing Company; Hants (England), 1996, p. 277.

⁴¹⁹ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 194,195. See also “Jans, Jan, Objectives and Principles of EC Environmental Law. In: Winter, Gerd (Ed.), **European Environmental Law, A Comparative Perspective**, Dartmouth Publishing Company, Hants (England), 1996, p. 277”.

⁴²⁰ Güneş, Yusuf & Coşkun, Aynur Aydın, **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 195.

environmental subjects. The most important ones are the Strategic Environmental Impact Assessment Directive (2001), the Directive on Access to Environmental Information (2003), the Directive on Participation of Public to Environmental Plans and Programs (2003) and LIFE (financial document for environment) regulation (2000).⁴²¹ It is clearly seen that EIA, public information and participation principles take place both in Barcelona Convention and EU law.

According to the Directive on Access to Information, the officials and even private authorities must take necessary measures to provide environmental information for citizens.⁴²² Therefore, citizens have a legally binding right to have environmental information in EU.⁴²³ That directive and the Directive on Participation of Public to Environmental Plans and Programs is parallel to the article 15 of the revised Barcelona Convention which obliges the contracting parties to give public appropriate access to information and opportunity to participate in environmental decision-making processes.⁴²⁴

Water protection is an important subject of EU Law. The water protection law and policy of EU generally depends on the principles of precaution, polluter pays, prevention of pollution at source, integration and sustainable development like the Barcelona Convention. EU Law involves many regulations and directives, concerning the water protection, coastal and marine environment. The main legal documents concerning the coastal and marine environment are the Directive on Bathing Water Quality (1976), the Directive on Dangerous Substances (1976), the Directive on Whales

⁴²¹ Ibid p. 196,197.

⁴²² Candan, Armağan; **Avrupa Birliği'nin Çevre Politikası, 15 Soruda 15 AB Politikası No:6**, İktisadi Kalkınma Vakfı, İstanbul, Ekim 2003, p. 8.

⁴²³ Kimber, Kliona, Understanding Access to Environmental Information: the European Experience. In: Jewell, Tim, Steele, Jenny (Eds), **Law in Environmental Decision-Making, National, European and International Perspectives**, Clarendon Press Oxford, First Published, New York, 1998, p. 147.

⁴²⁴ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 45,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

and other Cetaceans (1981), the Habitats Directive (1992), the Directive on Urban Waste Water (1998), and the Water Framework Directive (2000).⁴²⁵ If the subjects of the Barcelona Convention are considered, it is clear that EU regulates the same subjects with detailed legal instruments. It reveals the good enactment performance of EU.

On the other hand, there exist some problems about the implementation of the directives related with the Barcelona Convention. For instance, the directive on bathing water quality, which covers fresh and sea waters, requires the member states to report to the Commission on the quality of bathing water regularly. However, the member states are not successful at supervision of all bathing waters. Therefore, they can not inform the public on the quality of bathing water and it becomes difficult to fix quality objectives. Moreover, the measures taken by the directive on Dangerous substances (or the Directive on Discharges of Polluting Substances into Waters) were not implemented efficiently as the directive had not accepted obligatory emission standards for member states.⁴²⁶

In 2000, the Water Framework Directive was adopted that covers the protection of inland surface waters, transitional waters, groundwater and coastal waters. It replaces some existing directives such as the Directive on Dangerous Substances, the Directives on Drinking Water and the Directives on the Quality of Waters to Support Fish Life. Its aims are to provide a sufficient supply of water, to protect the aquatic ecosystems, to promote sustainable water use and to phase-out the discharges of the priority hazardous substances. It lists the dangerous substances for aquatic environment as the Hazardous Wastes Protocol of the Barcelona Convention⁴²⁷ does and it includes provisions on

⁴²⁵ Güneş, Yusuf & Coşkun, Aynur Aydın; **Çevre Hukuku**, Kazancı Kitap Ticaret AŞ, 1. Bası, İstanbul, Kasım 2004, p. 200-202.

⁴²⁶ Kramer, Ludwig, The Elaboration of EC Environmental Legislation. In: Winter, Gerd (Ed.), **European Environmental Law, A Comparative Perspective**, Dartmouth Publishing Company, Hants (England), 1996, p. 308,309.

⁴²⁷ See the list of hazardous wastes in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 166-168, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

public information. Its ecosystem approach is modern and innovative that it sees water as a heritage, not as a commercial product.⁴²⁸

A conference was held by EU and Mediterranean countries, which are Turkey, Tunisia, Algeria, Israel, Palestine, Jordan, Lebanon, Malta, Morocco, Syria, Egypt and Southern Cyprus, in 1995, in Barcelona. EU and these countries launched the Euro-Mediterranean Partnership at that Conference. Barcelona Declaration, which envisions a political, economic and social partnership, was adopted in this framework. The main point of the declaration is sustainable and balanced economic and social development in order to establish a Mediterranean free-trade area by 2010. Here, one of the most important roles of EU is to prevent the development gap between south and north by increasing its financial assistance.⁴²⁹

Under the framework of Euro-Mediterranean Partnership, environmental concerns take place as a part of social and economic development.⁴³⁰ The environmental objectives of the Partnership involve the reconciliation of development with environmental protection, the integration of environmental concerns into diverse sectors and the prevention of environmental challenges. In order to realise these objectives, the Declaration focuses on its attachment to the MAP and the importance of cooperation.⁴³¹

⁴²⁸ Sands QC, Philippe, **Principles of International Environmental Law**, Cambridge University Press, Second Edition, Cambridge, 2003, p. 769-771.

⁴²⁹ Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas, **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**, Ecologic, Institute for International and European Environmental Policy; Berlin, 2002, p. 36,
http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50).

⁴³⁰ Koçer, Banu, **The Environmental Policy within the Framework of Euro-Mediterranean Partnership** (M.A. Thesis), Marmara University European Community Institute, İstanbul, 1998, p. 64.

⁴³¹ Conrads, Axel, Interwies, Eduard & Kraemer, R. Andreas; **The Mediterranean Action Plan and the Euro-Mediterranean Partnership: Identifying Goals and Capacities-Improving Cooperation and Synergies**; Ecologic, Institute for International and European Environmental Policy; Berlin, 2002, p. 37,
http://www.ecologic.de/download/projekte/1900-1949/1905/1905project_report.pdf#search=%22%22The%20Mediterranean%20Action%20Plan%20and%20the%20Euro-Mediterranean%20Partnership%22%20pdf%22 (Sep. 17, 2006, 21.50).

An action plan was adopted for the implementation of the goals of Partnership that is called ‘The Short and Medium-Term Priority Environmental Action Programme (SMAP). The programme involves five priority subjects which are integrated water management, waste management, pollution hot spots, integrated coastal zone management and combating desertification. However, there are some problems about the implementation of the programme that the practical actions are needed regarding environmental protection, capacity building and modernisation of legislation and institutions. A struggle is necessary for the implementation of SMAP at national levels. EU should assist non-member states financially and technically for the better implementation of the Programme.⁴³²

EU determined its objectives about environmental policy for the period of 2000-2010. These objectives involve the effective implementation of directives, informing public well about the directives, changing the consumption patterns of public by producing environment-friendly products and increasing the participation of public in environmental decisionmaking processes.⁴³³

The performance of EU seems better than the developing Mediterranean countries such as Turkey which have weak infrastructures of democracy, information, education, participation mechanisms; and which are deprived of civil society culture.⁴³⁴ The objectives and legislation of EU are in harmony with the objectives and legal structure of MAP. However, practically, EU should strengthen its assisting role in the Mediterranean Basin as the developing countries of the Mediterranean focus more on development concerns. Therefore, the creation of a sustainable Mediterranean

⁴³² Ibid. p. 37,38.

⁴³³ Keleş, Ruşen & Hamamcı, Can, *Çevrebilim*, İmge Kitabevi, Ankara, 1993, p. 230-232.

⁴³⁴ Scoullos, Michael, “Strengths and Weaknesses”, *Our Planet, The Magazine of UNEP*, Mediterranean Action Plan at 30, UNEP, Nairobi, p. 9, http://www.unep.org/pdf/OurPlanet/op_english_map.pdf (Jan. 9, 2007, 23.41).

environment depends on EU's decisive actions and support projects for the southern and eastern Mediterranean.

VI. A CRITICAL ASSESSMENT OF REVISED MAP

In former chapters, important points are focused on about the natural structure of the Mediterranean Sea, the environmental pressures that it faces, historical evolution of MAP and its legal structure, the principle of sustainable development and other legal principles, the implementation of MAP, pollution sources and the protection system of revised MAP in the light of some articles of the amended Barcelona Convention, the state of the Mediterranean Sea in reality, legal and implementation performance of two contracting parties (Turkey and EU) to the Barcelona Convention. This chapter involves a general evaluation of revised MAP.

6.1. REVISED MAP AS A HOPE FOR A SUSTAINABLE MEDITERRANEAN

Unfortunately, there are many legal and institutional problems in the Mediterranean Region about the protection of the environment both in national and regional levels.⁴³⁵ Revised MAP (or MAP Phase II), with its strengthened legal structure, may be a solution. If it is not adopted, it seems that the problems will grow.

First, at national level the environmental law must be satisfying. Its legal measures should have the capacity to respond transboundary environmental issues. The contracting parties need a national coordinative body concerning transboundary environmental issues. That body will share the responsibilities clearly between local and central authorities and prevent the inconsistencies between the policies of different states

⁴³⁵ **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p. 122, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/medtda.pdf> (Sep.13, 2005, 11.31).

organs. These organs, which are responsible for the environment, should have well-educated experts. Lastly, transparency is crucial at national level. The public and pressure groups should have the opportunity to participate actively in the decisionmaking process, to access information.⁴³⁶

Second, at regional level the Mediterranean Region needs a binding legal framework, which involves the recent concepts of environmental law such as ICAM. A supranational coordinative body should exist to make sure the enforcement of that legal framework. Transboundary-related environmental problems can only be solved by such kind of legal and institutional measures.⁴³⁷

In 1995, the Contracting Parties to the Barcelona Convention adopted a new phase of the MAP (MAP Phase II) that is called ‘The Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean. The 1975 version of MAP is intended to be replaced by MAP Phase II.⁴³⁸

Under the framework of MAP Phase II, the Barcelona Convention and some of its Protocols were amended or replaced by their revised versions and new Protocols were also introduced in 90s.⁴³⁹ The Convention, Dumping and Land Based Sources Protocols were amended; the Emergency and SPA & Biodiversity Protocols were replaced by their revised versions; the Offshore and Hazardous Wastes Protocols were adopted as new legal instruments of MAP.⁴⁴⁰ All these revisions or amendments depend

⁴³⁶ Ibid.

⁴³⁷ Ibid. p. 122,123.

⁴³⁸ **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, Athens, 2002, p.i,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

⁴³⁹ See the information about legal documents of revised MAP (or MAP Phase II) in page 39-40.

⁴⁴⁰ **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p. 124,125,
<http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/me dt da.pdf> (Sep.13, 2005, 11.31).

on the principle of sustainable development. In other words, the new legal structure of MAP is the product of the integration of sustainable development principle into existing legal documents.⁴⁴¹

The revised Convention (It can be called as the ‘Constitution’ of MAP) has many positive sides. It takes into account the recommendations of Agenda 21 and involves the priority fields of activities for the development and environment in the Mediterranean region. It also recommends the system of time limits on environmental regulation.⁴⁴²

The geographical coverage of the revised Convention is now wider than the former one that it includes all areas of the Mediterranean Sea such as high seas. Moreover, the Convention also facilitates the extension of its Protocols’ geographical coverages.⁴⁴³

The revised Convention involves new concepts such as the precautionary principle, environmental impact assessment that are very necessary for the conservation of the environment. In the light of the relation between the environment and development, the revised MAP focuses on issues like integrated management of natural resources, integrated management of coastal zones, urban development and environment, tourism, industry, clean energy. It also tries to motivate, activate and unify

⁴⁴¹ **Développement Durable Dans La Région Méditerranéenne Synthèse Du Bilan Stratégique**, La Commission Méditerranéenne Du Développement Durable (CMDD), PNUE/PAM, Athenes, 2001, p. 19,

http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_synthesis_fre.pdf (Jan. 28, 2006, 18.50).

⁴⁴² Kütting, Gabriela, **Environment, Society and International Relations, Towards more effective international environmental agreements**, Taylor and Francis Books Limited, 2000, First published, London, 2000, p. 68.

⁴⁴³ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 11.

all stakeholders, individuals for the same target: A sustainable coastal and marine environment of the Mediterranean.⁴⁴⁴

If these developments are taken into consideration, it is difficult not to approve the MAP Phase II and its legal structure⁴⁴⁵ that is successful enough to integrate other social and economic sectors of the Mediterranean into its activities.⁴⁴⁶ The clear advantages of MAP Phase II are the better wording of the amended Convention that is now a much more prescriptive law setting out obligations and the dynamic structure of its legal system, which is capable of being subject to improvement.⁴⁴⁷

6.2. RATIFICATION PROBLEM OF NEW LEGAL TEXTS AND THE VITALITY OF PUBLIC SUPPORT

If the revision of its legal structure is taken into account, it can be clearly claimed that MAP goes in the right way. However, that does not mean there are not any problems. One of the most important problems is the lack of ratifications that strikes the image, credibility and the effectiveness of the Barcelona system.⁴⁴⁸ Four of the legal instruments of revised MAP, which are the amended versions of Dumping and Land-

⁴⁴⁴ **Développement Durable Dans La Région Méditerranéenne Synthèse Du Bilan Stratégique**, La Commission Méditerranéenne Du Développement Durable (CMDD), PNUÉ/PAM, Athenes, 2001, p. 19,

http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_synthesis_fre.pdf (Jan. 28, 2006, 18.50).

⁴⁴⁵ Greenpeace, the famous international NGO, approves the 1995 version of the Barcelona Convention. See “**Press Brief, The Barcelona Convention**, Greenpeace, <http://www.greenpeacemed.org.mt/barcon7.html> (Feb. 17, 2006, 19.14)”.

⁴⁴⁶ **The Barcelona Convention and the Mediterranean Action Plan**, http://www.medforum.org/documents/agenda2000/ap3_en.htm (Nov. 22, 2005, 17.13).

⁴⁴⁷ **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p. 124,125, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/medtda.pdf> (Sep.13, 2005, 11.31).

⁴⁴⁸ **Draft Strategic Assessment of the General Framework of the Barcelona Convention**, Meeting of Map National Focal Points, UNEP/MAP, Athens, 2003, p. 6, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/03WG228_5_eng.pdf (Sep. 18, 2006, 21.02).

Based Sources Protocols; and Offshore and Hazardous Wastes Protocols have not yet entered into force.⁴⁴⁹

These legal instruments need ratifications of more countries to enter into force. The Dumping Protocol requires additional three ratifications, the Offshore Protocol requires two, Hazardous Wastes Protocol requires one and lastly the LBS Protocol requires four additional ratifications to enter into force.⁴⁵⁰

Here, according to article 16/4⁴⁵¹ of 1976 version of Barcelona Convention at least three quarters of the Parties to the Convention or to the Protocols, must ratify an amended legal text. If so, the text enters into force.⁴⁵² For instance, the number of the Parties to the Dumping Protocol is 22. That means at least 17 countries must ratify the new (amended) text. Otherwise, the revised text of the Protocol does not enter into force.⁴⁵³ The same article is also applicable to the amended Land-based Sources Protocol which has not come into force yet.⁴⁵⁴

⁴⁴⁹ **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.3,4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

⁴⁵⁰ **Draft Strategic Assessment of the General Framework of the Barcelona Convention**, Meeting of Map National Focal Points, UNEP/MAP, Athens, 2003, p. 6, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/03WG228_5_eng.pdf (Sep. 18, 2006, 21.02) and see “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 3,4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

⁴⁵¹ That article corresponds to article 22/3 of the revised Convention. See the article in “**Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, , 2002, p. 48, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05)”.

⁴⁵² **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 9.

⁴⁵³ **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p.3,4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

⁴⁵⁴ See “**The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 7,8”.

On the other hand, according to article 27/3 of the 1976 Barcelona Convention, if a Protocol is intended to replace by a new one or a new Protocol is adopted, six ratifications are required for the text to enter into force.⁴⁵⁵ The 1995 SPA & Biodiversity Protocol came into force in 1999 according to article 27/3. Nevertheless, the Parties to the 1982 version of SPA & Biodiversity Protocol, which have not ratified the 1995 SPA & Biodiversity Protocol yet, are not bound by the 1995 Protocol.⁴⁵⁶ The same article is also applicable to the new Offshore and Hazardous Wastes Protocols which have not come into force yet.⁴⁵⁷

Of course, diverse reasons can be given about why many of these countries do not ratify the amended and new texts. For example, a lack of political will, the high threshold of acceptance (3/4 for amended texts and 6 ratifications for new Protocols) or some technical obligations involved by the amendments etc.⁴⁵⁸ It seems that the threshold of acceptance should be decreased. Of course, that requires a change in the Convention. If the threshold were 3/5, the amended MAP legal documents would have already come into force even including the LBS Protocol, which requires four ratifications.⁴⁵⁹

⁴⁵⁵ See article 27/3 of the 1976 Convention in “Environmental Treaties and Resource Indicators (ENTRI) -- Full Text, **Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and Protocols (1980,1982)**, Center for International Earth Science Information Network (CIESIN), <http://sedac.ciesin.org/entri/texts/mediterranean.pollution.1976.html> (Oct. 13, 2005, 17.41)”.

⁴⁵⁶ **The Revision of MAP Legal Framework: The Barcelona Convention and its Protocols**, UNEP/MAP, Athens, 2002, p. 9.

⁴⁵⁷ See “Ibid. p. 7,8”.

⁴⁵⁸ **Transboundary Diagnostic Analysis for the Mediterranean Sea**, UNEP/MAP, Athens, 2004, p. 125, <http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/medtda.pdf> (Sep.13, 2005, 11.31).

⁴⁵⁹ For instance: There are 22 countries that are Party to the LBS Protocol. If the threshold was 3/5, $22 \times 3/5 = 13.2$ that means 13 ratifications would be enough for the Protocol to enter into force. The LBS Protocol has already been ratified by 13 countries. See the table in p. 131 and “Ibid. p. 255”.

Table 4: Signatories to Barcelona Convention and its Protocols

Contracting Parties	Barcelona Convention 1/			Dumping Protocol 2/			Emergency Protocol 3/		New Emergency Protocol 4/	
	Signature	Ratification	Acceptance of Amendments	Signature	Ratification	Acceptance of Amendments	Signature	Ratification	Signature	Ratification
Albania	-	30.05.90/AC	26.07.2001	-	30.05.90/AC	26.07.2001	-	30.05.90/AC	-	-
Algeria	-	16.02.81/AC	09.06.2004	-	16.03.81/AC	-	-	16.03.81/AC	25.01.2002	-
Bosnia & Herzegovina	-	01.03.92/SUC	-	-	01.03.92/SUC	-	-	01.03.92/SUC	-	-
Croatia	-	08.10.91/SUC	03.05.1999	-	08.10.91/SUC	03.05.1999	-	08.10.91/SUC	25.01.2002	01.10.2003
Cyprus	16.02.1976	19.11.1979	15.10.2001	16.02.1976	19.11.1979	18.07.03	16.02.1976	19.11.1979	25.01.2002	-
European Commission	13.09.1976	16.03.78/AP	12.11.1999	13.09.1976	16.03.78/AP	12.11.1999	13.09.1976	12.08.81/AP	25.01.2002	25.06.2004
Egypt	16.02.1976	24.08.78/AP	11.02.2000	16.02.1976	24.08.78/AP	11.02.2000	16.02.1976	24.08.78/AC	-	-
France	16.02.1976	11.03.78/AP	16.04.2001	16.02.1976	11.03.78/AP	16.04.2001	16.02.1976	11.03.78/AP	25.01.2002	02.07.2003
Greece	16.02.1976	03.01.1979	10.03.2003	11.02.1977	03.01.1979	-	16.02.1976	03.01.1979	25.01.2002	-
Israel	16.02.1976	03.03.1978	-	16.02.1976	01.03.1984	-	16.02.1976	03.03.1978	22.01.2003	-
Italy	16.02.1976	03.02.1979	07.09.1999	16.02.1976	03.02.1979	07.09.1999	16.02.1976	03.02.1979	25.01.2002	-
Lebanon	16.02.1976	08.11.77/AC	-	16.02.1976	08.11.77/AC	-	16.02.1976	08.11.77/AC	-	-
Libya	31.01.1977	31.01.1979	-	31.01.1977	31.01.1979	-	31.01.1977	31.01.1979	25.01.2002	-
Malta	16.02.1976	30.12.1977	28.10.1999	16.02.1976	30.12.1977	28.10.1999	16.02.1976	30.12.1977	25.01.2002	18.02.2003
Monaco	16.02.1976	20.09.1977	11.04.1997	16.02.1976	20.09.1977	11.04.1997	16.02.1976	20.09.1977	25.01.2002	03.04.2002
Morocco	16.02.1976	15.01.1980	07.12.2004	16.02.1976	15.01.1980	05.12.1997	16.02.1976	15.01.1980	25.01.2002	-
Serbia & Montenegro*	-	16.07.2002	-	-	16.07.2002	-	-	16.07.2002	-	-
Slovenia	-	15.03.94/AC	08.01.2003	-	15.03.94/AC	08.01.2003	-	15.03.94/AC	25.01.2002	16.02.2004
Spain	16.02.1976	17.12.1976	17.02.1999	16.02.1976	17.12.1976	17.02.1999	16.02.1976	17.12.1976	25.01.2002	-
Syria	-	26.12.78/AC	10.10.2003	-	26.12.78/AC	-	-	26.12.78/AC	25.01.2002	-
Tunisia	25.05.1976	30.07.1977	01.06.1998	25.05.1976	30.07.1977	01.06.1998	25.05.1976	30.07.1977	25.01.2002	-
Turkey	16.02.1976	06.04.1981	18.09.2002	16.02.1976	06.04.1981	18.09.2002	16.02.1976	06.04.1981	-	04.06.2003

Source: **The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols, p. 1,**

http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

Contracting Parties	Land-Based Sources Protocol 5/			Specially Protected Areas Protocol 6/		SPA & Biodiversity Protocol 7/		Offshore Protocol 8/		Hazardous Wastes Protocol 9/	
	Signature	Ratification	Acceptance of Amendments	Signature	Ratification	Signature	Ratification	Signature	Ratification	Signature	Ratification
Albania	-	30.05.90/AC	26.07.2001	-	30.05.90/AC	10.06.1995	26.07.2001	-	26.07.2001	-	26.07.2001
Algeria	-	02.05.83/AC	-	-	16.05.85/AC	10.06.1995	-	-	-	01.10.1996	-
Bosnia & Herzegovina	-	22.10.94/SUC	-	-	22.10.94/SUC	-	-	-	-	-	-
Croatia	-	12.06.92/SUC	-	-	12.06.92/SUC	10.06.1995	12.04.2002	14.10.1994	-	-	-
Cyprus	17.05.1980	28.06.1988	12.10.2001	-	28.06.88/AC	10.06.1995	15.10.2001	14.10.1994	15.10.2001	-	-
European Commission	17.05.1980	07.10.83/AP	12.11.1999	30.03.1983	30.06.84/AP	10.06.1995	12.11.1999	-	-	-	-
Egypt	-	18.05.83/AC	-	16.02.1983	08.07.1983	10.06.1995	11.02.2000	-	-	01.10.1996	-
France	17.05.1980	13.07.82/AP	16.04.2001	03.04.1982	02.09.86/AP	10.06.1995	16.04.2001	-	-	-	-
Greece	17.05.1980	26.01.1987	10.03.2003	03.04.1982	26.01.1987	10.06.1995	-	14.10.1994	-	01.10.1996	-
Israel	17.05.1980	21.02.1991	-	03.04.1982	28.10.1987	10.06.1995	-	14.10.1994	-	-	-
Italy	17.05.1980	04.07.1985	07.09.1999	03.04.1982	04.07.1985	10.06.1995	07.09.1999	14.10.1994	-	01.10.1996	-
Lebanon	17.05.1980	27.12.1994	-	-	27.12.94/AC	-	-	-	-	-	-
Libya	17.05.1980	06.06.89/AP	-	-	06.06.89/AC	10.06.1995	-	-	-	01.10.1996	-
Malta	17.05.1980	02.03.1989	28.10.1999	03.04.1982	11.01.1988	10.06.1995	28.10.1999	14.10.1994	-	01.10.1996	28.10.1999
Monaco	17.05.1980	12.01.1983	26.11.1996	03.04.1982	29.05.1989	10.06.1995	03.06.1997	14.10.1994	-	01.10.1996	-
Morocco	17.05.1980	09.02.1987	02.10.1996	02.04.1983	22.06.1990	10.06.1995	-	-	01.07.1999	20.03.1997	01.07.1999
Serbia & Montenegro*	-	16.07.2002	-	-	16.07.2002	-	-	-	-	-	-
Slovenia	-	16.09.93/AC	08.01.2003	-	16.09.93/AC	-	08.01.2003	10.10.1995	-	-	-
Spain	17.05.1980	06.06.1984	17.02.1999	03.04.1982	22.12.1987	10.06.1995	23.12.1998	14.10.1994	-	01.10.1996	-
Syria	-	01.12.93/AC	-	-	11.09.92/AC	-	10.10.2003	20.09.1995	-	-	-
Tunisia	17.05.1980	29.10.1981	01.06.1998	03.04.1982	26.05.1983	10.06.1995	01.06.1998	14.10.1994	01.06.1998	01.10.1996	01.06.1998
Turkey	-	21.02.83/AC	18.05.2002	-	06.11.86/AC	10.06.1995	18.09.2002	-	-	01.10.1996	03.04.2004

Source: The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols, p. 2, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10).

The lack of ratifications is a very serious problem for the Mediterranean environment. Four protocols of the Barcelona Convention, revised and new texts, are not binding now.⁴⁶⁰ For this reason, there are many problems of implementation about the plans and strategies.⁴⁶¹

If the scope of the Convention is taken into consideration, while the 1976 text covers only the marine waters of the Mediterranean, the 1995 text also covers the coastal zones and watersheds. The 1976 text is restricted. This was an important disadvantage, because most of the environmental problems are based on the terrestrial zones such as urban wastes, industrial and agricultural pollution etc. There is also a very useful article in 1995 text about the necessity of public awareness on the state of environment and public participation in the decision-making procedures (art.15).⁴⁶² Fortunately, the revised text of the Convention is in force now.⁴⁶³

However, for the better implementation of revised Barcelona Convention, all revised and new Protocols of the Convention should enter into force. Most of the fragile Mediterranean environment remains deprived of such legal measures as four protocols wait for ratification.

The lack of political will about MAP Phase II should be discussed. In fact, the lack of political will is not only the problem of Mediterranean Countries' but also the

⁴⁶⁰ See “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 3,4, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

⁴⁶¹ **Draft Strategic Assessment of the General Framework of the Barcelona Convention**, Meeting of Map National Focal Points, UNEP/MAP, Athens, 2003, p. 6, http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=DocumentiMeeting/ENGLISH/Finalized/03WG228_5_eng.pdf (Sep. 18, 2006, 21.02).

⁴⁶² **Protect the Mediterranean?** Ratify the Barcelona Convention and its Protocols now, General Assembly of Med Forum, Barcelona, November 21 1998, <http://www.medforum.org/informacio/monografics/ratificad/english.htm> (Now. 22, 2005, 17.13).

⁴⁶³ See “**The Status of Signatures and Ratifications of the Barcelona Convention and its Protocols**, p. 3, http://www.unepmap.org/Archivio/All_Languages/WebDocs/WordDocs/StatusOfSignaturesAndRatifications.doc (Sep. 19, 2006, 21.10)”.

problem of the World. In general, states refrain from signing or ratifying decisive and concrete environmental initiatives. For instance, the government of USA refrains from ratifying the Kyoto Protocol, a global environmental initiative that obliges its Parties to decrease their greenhouse gas emissions progressively to a certain level. Because, there are many negative factors influencing national and global policies.

The main factor is globalism. Global and supranational companies dominate today's world economy. Majority of these companies exploit the natural resources and raw materials of third world by establishing their factories there. They not only give small quantity of money to their employees that are the citizens of a poor country but also make them work in heavy conditions. Producers, farmers of third world gain less and less money day by day because of unfair agricultural policies of rich (developed) states. (For example, the rich states give financial aids and export subventions to their national farmers so the products of third world can not compete fairly with the products of rich world.) They install some of their risky establishments in third world without taking into account environmental concerns. For instance, a foreign gold firm used a toxic substance while searching gold in Bergama, a town in Aegean Region of Turkey. That action harmed land and water resources.⁴⁶⁴

These global companies aim to lead a consumption society. They seem successful. That type of society changes people's daily lives, lifestyles and such a change reflects to the environment. For instance, according to a research in France:

Between 1960 and 2003, the municipal wastes were doubled reaching 400 kg per person and per year. The garbage cans continue to increase 1% in size while the treatment capacities stay as the same.⁴⁶⁵

⁴⁶⁴ See "Ertem, Raif, **Avcının Notları 1996-2000**, Aydınlanma Dizisi:207, Cumhuriyet, Yeni Gün Haber Ajansı Basın ve Yayıncılık AŞ, Haziran 2001, p. 97,110,136".

⁴⁶⁵ **Les modes de vie des Français se lisent dans leur poubelles**, Déchets, AFP, Paris, <http://lalisteasuiivre.blog4ever.com/blog/lirarticle-4524-11198.html> (Feb. 17, 2006, 18.42) (translation).

The global economic system encourages individuals to consume more and more and to become addicted to consumption. If so, the consumption rates increase and, in parallel with the consumption rates, the financial gains of international global companies increase, too. For example, it is clear that, there is a close relation between this global economic system (that depends on unlimited financial gains) and the type of transport in especially third world.⁴⁶⁶

It is known that trains are cheaper, safer, faster (recent ones) and more environment-friendly than cars or buses. However, in Turkey, a developing country, for instance, there are not enough railways. The level of maritime transport, which is the cheapest and safest type of transport, is also low. Approximately 90% of peoples and products are transported by buses, trucks or cars through land ways while maritime and railway transport represent only 10%. Land way transport is preferred in general even though it is not an environment-friendly way of transport. The construction of new roads causes the degradation of the environment. Some of them pass through fertile agricultural lands, forests, coastal areas, habitats of animals and historical places so they do not only hinder the economic activities but also damage the ecosystem and historical richness.⁴⁶⁷

Although the negative effects of land way transport are so clear, railways or maritime transport is not preferred. Because some global companies and some politicians of developed world control and influence the policies of third world cooperatively as the economies of third world are dependent because of their debts. That influence, of course, is not in favour of sustainable development but in favour of consumption society.

⁴⁶⁶ Ertem, Raif, **Avcının Notları 1996-2000**, Aydınlanma Dizisi:207, Cumhuriyet, Yeni Gün Haber Ajansı Basın ve Yayıncılık AŞ, Haziran 2001, p. 107,108.

⁴⁶⁷ Ibid.

The environment-friendly ways of transport contradict with the benefits of some global economic actors such as some global companies. These actors increase their financial gains by selling petroleum-fuel oil, luxury cars, jeeps etc. They have also factories of textile, food, electronical things etc. They dominate the international industry and transaction. The third world and poor countries are markets for them. They aim to sell more and more goods. In order to sell more they try to impose a fast type of life to the uneducated individuals of poor world. That life depends on unlimited consumption. That life, a unique culture is imposed on individuals by TV programs, cinema films and internet sites. Individuals, who are under the impact of consumption society, do not know anything about the famine in Africa or the dangerous level of global warming.

Individuals can not be aware of some politicians' and traders' harm on environment because these politicians and traders determine the news agenda.⁴⁶⁸ They do not participate actively in decisionmaking process of environmental policies. For this reason, they are not interested in environmental issues. They become estranged from nature. Therefore cultural pollution (degeneration) starts. Cultural pollution triggers the other types of pollution. In fact; water, air and soil are polluted because of cultural pollution.⁴⁶⁹

Local cultures are polluted especially in third world. It is known that, local (national) cultures interact with each other. That means a degenerated local (national) culture causes the degeneration of others. Therefore, the cultural pollution- that causes the pollution of the environment- is a transboundary problem. The degeneration of local cultures is a common problem of humanity.⁴⁷⁰

⁴⁶⁸ Ekinci, Oktay, **İnsan Hakları ve Çevre**, Anahtar Kitaplar Yayınevi, İstanbul, 1994, p.15 (translation).

⁴⁶⁹ Bektaş, Cengiz, Kültürel, Güzelduyusal Kirlenme. In: Keleş, Ruşen (Ed.), **İnsan Çevre Toplum**, İmge Kitabevi, Ankara, 1992, p. 67 (translation).

⁴⁷⁰ Ibid. p. 68.

Cultural pollution can be seen clearly in unplanned urbanisation areas of cities especially in third world. Uneducated and poor immigrants of rural areas try to live in bad conditions. They have many economical, cultural problems. They are under the impact of luxury lives presented by TV programs. Although they are poor, they want to consume more and luxury products.⁴⁷¹ Shortly, in general, individuals are not conscious enough to criticize not only environmental policies but also the other ones such as education, health etc.

The key words are public awareness, information, education and participation to get rid of the problems. Citizens should be not only aware of environmental issues but also should participate in the process of policymaking. The respect for the environment should be taught them by using logical education strategies.

The legislators of 1995 text of the Barcelona Convention (that is adopted under the framework of MAP Phase II), recognizing the importance of these concepts, have inserted article fifteen that is on public information and participation. According to that article, the Contracting Parties are responsible to provide individuals access to information on Mediterranean environment and to provide their active participation in decisionmaking processes concerning the Mediterranean environment (or the field of application of the Convention and the Protocols).⁴⁷²

It is better to evaluate article 15/1⁴⁷³ extensively. For instance, Turkey ratified the revised Barcelona Convention. A Turkish citizen can apply to Ministry of

⁴⁷¹ Keleş, Ruşen & Hamamcı, Can, *Çevrebilim*, İmge Kitabevi, Ankara, 1993, p. 171.

⁴⁷² **Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols**, UNEP, MAP Coordinating Unit, 2nd Edition, Athens, 2002, p. 45,
http://www.unepmap.org/include/MAPMeetingsSearch/Download.asp?allegato=MTS/ENGLISH/02bur59_inf4_eng.pdf (Oct. 5, 2005, 19.05).

⁴⁷³ Article 15/1 of the revised Barcelona Convention: "The Contracting Parties shall ensure that their competent authorities shall give to the public appropriate access to information on the environmental state in the field of application of the Convention and the Protocols, on activities or measures adversely affecting or likely to affect it and on activities carried out or measures taken in accordance with the Convention and the Protocols". See "Ibid".

Environment and Forestry and want officials to give him/her information about the pollution state of the Mediterranean Coasts. There is no problem. Citizens have a right to access to information. However, that is not enough. Turkey should also inform citizens about the pollution state of its Mediterranean Coasts even when citizens do not apply. The Contracting Parties should work actively to make their citizens aware of environmental issues. It happens by initiating campaigns with the support of mass media and NGOs in order to make the nature attracting for public. For example:

A campaign was organised in Algeria between 29 October 2002 and 31 March 2003. The name of the campaign was “the train of the environment”. The actors of the campaign were the Algerian Ministry of Environment and GTZ that is a German Public Enterprise. The campaign was organised under the framework of the program “German-Algerian integrated management of the environment”. A train was prepared for a long journey in Algeria. The exterior side of the train was covered with pictures of animals and nature. The interior side of the train was also designed. Every wagon was loaded with brochures and some materials. There was an exposition and a video film presentation in the train. People could enter the train freely. Guides helped them and tried to attract their attention on environmental issues such as biodiversity or urban environment. The train stopped a few days in many cities and towns.⁴⁷⁴

Media also supported the campaign. It informed the public about the train. The information was given to public everyday on TV about the destinations of the train. As a result, the train was successful to attract the attention of public that not only more than one million individuals visited the train but also 22 enterprises initiated an environmental management program and 35 mayors signed the charts of environment.

⁴⁷⁴ **Communiquer sur le Développement Durable, Comment Produire des Campagnes Publiques Efficaces**, PNUE, Futerra, 2005, p. 28,29, http://www.unep.fr/pc/sustain/reports/advertising/Communication_Guide/webFR.pdf (Jan. 28, 2006, 18.37).

In the light of the campaign, the Algerian Ministry of Environment started to revise its environmental policy.⁴⁷⁵

That example proves not only the positive effects of a campaign supported by the government and mass media but also the importance of public awareness. If individuals understand that the natural resources are vital for their lives and if they become aware of their rights and environmental issues, they become more active in favour of the environment. They join the NGOs, pressure groups, political parties. As sensible individuals, they can influence the national and global policies.⁴⁷⁶ They can vote for environment-friendly political parties, they can protest the decisions of politicians concerning the environment under the framework of law; they can show a reaction against the consumption society.

One of the aims of MAP Phase II is to make people participate in decisionmaking process. To reach this aim, different stakeholders such as universities, local authorities, business enterprises and civil society should be informed well and state officials should interact with them and consult them. Information sharing activities should be organised such as workshops.⁴⁷⁷

By doing so, stakeholders will be increasingly aware and thus more actively involved in the key issues affecting their daily lives. They will have the sense of ownership of the decisions related to them and, their contribution will be more efficient.⁴⁷⁸

⁴⁷⁵ Ibid.

⁴⁷⁶ See 'Geray, Cevat, Çevre için Eğitim. In: Keleş, Ruşen (Ed.), **İnsan Çevre Toplum**, İmge Kitabevi, Ankara, 1992, p. 226-227'.

⁴⁷⁷ **Towards Sustainable Development in the Mediterranean Region**, UNEP/MAP, Kontorousis Bros. Graphic Arts, Athens, 2002, p. 11.

⁴⁷⁸ **MedWaves**, The Map Magazine, Issue 51, Catania Declaration, UNEP/MAP, Athens, p.19, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MedWaves/MW51.pdf (Oct. 5, 2005, 19.30).

As a result, the sensibility and positive effects of public about the conservation of (Mediterranean) environment increase. National and international policies become in favour of environmental concerns. In other words, political will increases and more countries ratify international environmental conventions and protocols.

The MAP Phase II, especially its legal framework, is a chance for a sustainable Mediterranean Environment. However, that does not mean MAP Phase II is perfect. It has some deficiencies. For a more effective and ideal action plan, MAP should be developed. These are the expectations:

- The Contracting Parties should be assisted legally during the adoption process of MAP legal instruments.
- The responsible decisionmakers and officials of each country should be informed on sustainability adapted to the characteristics of their countries.
- In order to assist the sustainable development process of the countries new strategies should be shaped for the main development sectors.
- New external funding facilities should be found.
- The Coordinating Unit of MAP should manage the financial mechanisms in favour of developing countries.⁴⁷⁹

⁴⁷⁹ **Strategic Review for Sustainable Development in the Mediterranean Region**, MCSD, UNEP/MAP, Athens, 2001, p. 82, http://www.unepmap.org/Archivio/All_Languages/WebDocs/MAPpublications/MCSD/MCSD_sr_en_g.pdf (Feb. 11, 2006, 18.36).

CONCLUSION

The Mediterranean countries, realizing the warnings of the Mediterranean ecosystem, came together in a meeting organized by UNEP in 1975 and adopted the Mediterranean Action Plan. MAP is a (non-binding) soft law document that focuses on sustainable development and conservation of the Mediterranean ecosystem. Nevertheless, the Plan has a binding legal framework. The main legal framework of MAP is the Barcelona Convention which is a framework convention. Additionally, it has Protocols which set out detailed obligations.

MAP with its old legal structure could not be a solution for Mediterranean environment in long-term. So, in the light of the global developments concerning environmental law between 1975 and 1995, MAP was revised by the contracting parties to the Barcelona Convention. The Barcelona Convention was amended with modern concepts, principles and articles concerning international environmental law. Moreover, new protocols on different subjects were adopted and the existing protocols were amended or replaced by their revised versions. So, the geographical and conceptual scope of the Convention expanded through revised and new legal instruments. Shortly, the legal framework of MAP strengthened.

The main principle, which is integrated into MAP legal framework, is the principle of sustainable development that covers many modern legal aspects such as social justice, public information and participation which take place in MAP's modernised legal framework. Moreover, modern principles of international environmental law such as precautionary principle, polluter pays principle, integration principle, EIA and modern articles on prevention of pollution originating from different sources and conservation of resources entered into MAP legal framework.

However, although the MAP legal framework was reinforced, there are problems of implementation and weaknesses especially in developing Mediterranean countries such as Turkey which is not successful enough to implement its modern environmental law. The performance of EU, on the other hand, seems satisfactory when compared with the developing Mediterranean countries such as Turkey which have weak infrastructures of democracy, information, education, participation mechanisms; and which are deprived of civil society culture.

The major problem that strikes the image and credibility of MAP legal system is the lack of ratifications. Four of the legal documents of revised MAP, which are the amended versions of Dumping and Land-based Sources Protocols; and Offshore and Hazardous Wastes Protocols, have not entered into force yet. Unfortunately, the Mediterranean environment is deprived of such modern legal measures as MAP can not be practised well and the Mediterranean environment continues to give warnings.

In order to solve transboundary environmental problems, cooperation of states in international level is crucial. International initiatives which cover action plans and legal instruments are good examples of international cooperation. However, states that are members of action plans and parties to international legal instruments should decisively continue to contribute to the process of international cooperation. They should adapt the plans and legal instruments to the changing needs. Moreover, they should not only ratify the legal instruments but also implement them as soon as possible. Otherwise, environmental problems continue to increase.

On the other hand, ratification and efficient implementation of international legal instruments depends on the awareness level of public concerning the environmental issues. Because, in order to support and implement international legal instruments efficiently, the struggle of all stakeholders such as NGOs, local authorities, universities, private sector and citizens is necessary.

Adoption of even the best laws may not be enough to solve environmental problems. Individuals should recognize the necessity of legal rules and should obey them in daily life. That is very important for the efficient implementation of legal texts. If individuals are uneducated, unconscious and passive, the implementation level of legal texts decreases.

States are responsible to inform and educate their citizens on protection of the environment and to facilitate their participation in the decisionmaking process of environmental policies. If the citizens participate in policymaking process, their sensibility level about environmental protection increases. They can positively influence the policies of their governments in favour of the environment. Conscious and sensible citizens can have a pressure on policymakers to make them ratify and implement the international initiatives such as the revised Barcelona Convention and its Protocols.

Consequently, MAP, with its revisioned, dynamic and clear legal structure, is a strong environmental project. It is a hope for a sustainable Mediterranean environment. The Mediterranean countries taking into account the mechanisms of public information and participation, should ratify the amended versions of Dumping and Land-based Sources Protocols and Offshore and Hazardous Wastes Protocols and implement the necessary measures as soon as possible.

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