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**MEDITERRANEAN ACTION PLAN**

Sixth Ordinary Meeting of the Contracting  
Parties to the Convention for the Protection  
of the Mediterranean Sea against Pollution  
and its Related Protocols

Athens, 3-6 October 1989

Contribution of Mediterranean Coastal States to the 1992  
United Nations Conference on Environment and Development

Note by the Secretariat

1. At the joint meeting of the Scientific and Technical Committee and the Socio-economic Committee, held in Athens (26-30 June 1989), several delegates referred to the United Nations Conference scheduled for 1992 on the subject of environment and development, and suggested that Mediterranean countries prepare, from an early stage, a presentation of common positions on Mediterranean priorities. To this end, the Greek delegate invited the Secretariat to prepare a document for the Contracting Parties meeting in October 1989, referring to the need for such preparation, the list of indicative priority topics to be dealt with, and the envisaged workplan of the Mediterranean countries through MAP structure. After discussion, these proposals were accepted by the meeting.
2. This present note has been prepared in response to that request.
3. It should be recalled that the decision on the exact scope, title, venue and date of the Conference and on the modalities and financial implications of holding the Conference will be considered by the General Assembly at its forty-fourth session in 1989. In response to an invitation by the General Assembly, the UNEP Governing Council adopted decision 15/3 that contains, in an Annex, the elements to be considered for inclusion in a resolution of the General Assembly. The Decision is being submitted through the Economic and Social Council. Its text is reproduced in Annex I to the present document.
4. The Mediterranean is the region in which the relationship of environment and development has been explored in greater depth in the socio-economic component of the Mediterranean Action Plan, through the Blue Plan exercise. From 1977 countries of a major region of the world have combined their efforts in order to explore the dynamic relationships between their economic and social development and their common environment, from the sea they surround to its shores and hinterland. This study and reflection on the possible futures of the Mediterranean basin, intended to illustrate the future consequences of decisions taken - or not taken - now, to highlight linkages between events and action, to identify issues and to detect potential breaking points.
5. Its objective was to provide authorities and planners in the various countries with the opportunity of continuously setting their national development strategies within a context that assures, as far as possible, protection of the Mediterranean environment. In addition, it facilitates identification of useful areas of cooperation.
6. The whole exercise confirmed the assumption on which it was largely based, namely that the national strategies and development policies pursued by all the Mediterranean countries have a significant impact on the state of environment in the region. It shows, in particular, that protection of the Mediterranean Sea, its shores and coastal regions cannot be assured through action carried out on the sea alone, or its coastal regions alone, but depends largely on the development, environment and physical planning policies followed by the Mediterranean countries at the entire national level. It also depends on economic and commercial interactions between these countries as a whole and the rest of the world in the agriculture, industry, energy, tourism and transport sectors. In this respect, the scenarios confirm the validity of analyses carried out in other studies, such as the report of the World

Commission of Environment and Development or UNEP's "Environmental Prospectives up to the Year 2000 and Beyond".

7. More specifically, the exercise has indicated that even in the most favorable scenarios, protection of the land and coastal strip will be very difficult in the long run because of growing human pressures and the vulnerability of the natural environment and will in fact imply a permanent mobilization on behalf of the environment.

8. During the coming decades considerable investment will be required to ensure an economic and social development compatible with the needs of the Mediterranean populations, especially in the south and east of the basin. Environmental protection should be incorporated in this investment from the outset and should not be considered, as is still too often the case, as an additional cost, which can be dispensed with or postponed until later. In fact, environmental protection and the search for sustainable development may be a source of employment and wealth. The main fact that emerges from the scenarios, however, is that, in the case of the Mediterranean basin, **development itself will only be achieved through protection of the environment**: without it, the fragility of environments makes natural resources vulnerable, and living conditions - the charm of the region - deteriorate to the cost of the population and visitors alike.

9. Greatly increased North-South solidarity and South-South co-operation are fundamental for the protection of the sea and the basin as a whole. Solidarity and co-operation not only for environmental protection, but to ensure the harmonious growth of intra-Mediterranean trade (making it possible, in particular to offset food shortages), the development of communication systems (in all forms), a mobilization geared to new technologies adapted to the conditions of the region, and a better understanding of the demands of the future on the part of each and every Mediterranean person.

10. The Blue Plan experience, therefore, carries a message that should be of interest to a wider audience. The eighteen countries covered by the study, with their 360 million people constitute a highly representative sample of the UN membership. They include developing and developed countries (among the latter two of the seven most industrialized western countries), large and small (from Algeria's 2,381,700 km<sup>2</sup> to Monaco's 2 km<sup>2</sup>) and reflect a variety of cultures, religions and legal systems.

11. The Blue Plan conclusions, accepted by the Mediterranean coastal states, about their responsibility for their environment are highly relevant for the global debate that will take place under UN auspices in 1992 and for the preparatory process that will take place in 1990-1991.

12. Many of these concepts are found in the Final Declaration of the Summit of the 7 most industrialized countries (Paris, 16 July 1989). Their commitment to the environment will be important to the success of the 1992 Conference.

13. The "List of indicative priority topics" to be considered by the Mediterranean coastal states should include:

- all those identified in the conclusions of the Executive Summary of the Blue Plan: (see Annex II)
- all those identified by the Protocols to the Barcelona Convention and, in particular by the process of implementation of the Protocol on Land Based Sources: (see Annex III)
- an agreed position on the financial and institutional implications of Mediterranean cooperation at the level required to give effect to the two commitments stated above to be developed by the Secretariat and reviewed by government experts in 1990 (a workplan through the MAP structure is proposed in Annex IV), before their eventual approval by the seventh meeting of the Contracting Parties in 1991 or by an ad hoc meeting of the Expanded Bureau in 1991.

14. Should the meeting agree to start the process of preparation for the 1992 Conference, as proposed, and adopt the corresponding budget estimates, the latter will be added to the 1990-1991 programme budget submitted for approval in document UNEP(OCA)/MED IG.1/4.

## ANNEX I

15/3. United Nations conference on environment and developmentThe Governing Council

Taking note of General Assembly resolution 43/196 of 20 December 1988 by which it decided to consider at its forty-fourth session the question of the convening, no later than 1992, of a United Nations conference on environment and development, with a view to taking an appropriate decision on the exact scope, title, venue and date of such a conference and on the modalities and financial implications of holding the conference,

Recalling that the General Assembly in paragraph 5 of its resolution 43/196 invited the Governing Council to consider the documents referred to in paragraphs 2 to 4 of that resolution and on the basis of that consideration to submit to the General Assembly at its forty-fourth session, through the Economic and Social Council, its views on the matters referred to in the resolution, in particular its views on the objectives, content and scope of the conference,

Decides to recommend that the General Assembly, when taking a decision on the exact scope, title, venue and date of a United Nations conference on environment and development, to be held no later than 1992, and on the modalities and financial implications of holding the conference, should consider the elements annexed to the present decision.

12th meeting  
25 May 1989

Annex

ELEMENTS TO BE CONSIDERED FOR INCLUSION IN A RESOLUTION OF THE  
GENERAL ASSEMBLY AT ITS FORTY-FOURTH SESSION OF THE CONVENING  
OF A UNITED NATIONS CONFERENCE ON ENVIRONMENT AND  
DEVELOPMENT NO LATER THAN 1992

A. Preambular elements

Recalling its resolution 43/196 of 20 December 1988, by which it decided to consider at its forty-fourth session the question of the convening of a United Nations conference on environment and development no later than 1992, with a view to taking an appropriate decision on the exact scope, title, venue and date of such a conference and on the modalities and financial implications of holding the conference,

Taking note with appreciation of the report of the Secretary-General on the conference submitting the views of Governments and of appropriate organs, organizations and programmes of the United Nations system and relevant intergovernmental and non-governmental organizations,

B. Operative elements

1. Decides to convene a United Nations Conference on Environment and Development of two weeks' duration and at the highest level of participation, to coincide, if possible, with World Environment Day, 5 June 1992;

2. Affirms that the preamble of resolution 43/196 broadly sets out the scope and general objectives for the Conference;

3. Notes in this context the importance of exploring the best ways and means of promoting sustainable and environmentally sound development in all countries through preventive measures at the sources of environmental and natural resources degradation, taking into account the Environmental Perspective to the Year 2000 and Beyond and the report of the World Commission on Environment and Development;

4. Affirms also that the following environmental issues, which are not listed in any particular order of priority, are among those of major concern in maintaining the quality of the earth's environment and especially for achieving an environmentally sound and sustainable development in all countries:

(a) Protection of the atmosphere by combating climate change and global warming, depletion of the ozone layer, and transboundary air pollution;

(b) Protection of the quality of freshwater resources;

(c) Protection of ocean and coastal areas and resources;

(d) Protection of land resources by combating deforestation and desertification;

(e) Conservation of biological diversity;

(f) Environmentally sound management of biotechnology;

(g) Environmentally sound management of hazardous wastes and toxic chemicals;

(h) Protection of human health conditions and quality of life, especially the living and working environment of poor people, from degradation of the environment;

5. Decides that the Conference should:

(a) Examine the state of the environment twenty years after the 1972 United Nations Conference on the Human Environment, including reviewing actions taken by all countries and intergovernmental organizations to protect and enhance the environment and how environmental concerns have been incorporated in economic and social policies and planning;

- (b) Identify strategies to be co-ordinated, as appropriate, regionally and globally for national and international action, with a view to arriving at formal agreements by Governments on specific commitments for defined activities to deal with major environmental issues in the economic and social development processes and within a particular timeframe;
- (c) Define guidelines to protect the environment through preventive action at the sources by, inter alia, incorporating environmental concerns in the economic and social development processes, taking into account the specific needs of developing countries;
- (d) Identify ways and means to further development of and provision of information on environmentally sound technologies and environmental management, to facilitate access to and transfer of such information and technologies, in particular to developing countries, without excessive costs, and to assist the development by those countries of their own technologies;
- (e) Promote an open and timely exchange of information on national environmental policies, situations and accidents;
- (f) Assess the capacity of the United Nations system to monitor environmental threats and deal with environmental emergencies and make recommendations for improvement;
- (g) Recommend measures to the relevant international organizations to promote a supportive international economic environment through specific commitments by Governments that would result in sustained and environmentally sound development and economic growth in all countries, with a view to combating poverty and improving the quality of life;
- (h) Promote the development or strengthening of appropriate institutions at the national, regional and global level to address environmental matters in the context of economic and social development processes;
- (i) Promote environmental education, especially of the younger generation;
- (j) Specify the respective responsibilities of, and support to be given by, the organs, organizations and programmes of the United Nations system for the implementation of the conclusions of the Conference;
- (k) Quantify financial requirements for the successful implementation of Conference decisions and recommendations, and identify possible sources, including innovative ones, in the international community for additional resources as may be required;

6. Decides that the intergovernmental Preparatory Committee, with its own rules of procedure, be the Governing Council of the United Nations Environment Programme, open on a basis of equality to all States Members of the United Nations or members of a specialized agency or of the International Atomic Energy Agency;

7. Further decides that the first session of the Preparatory Committee should be held in June 1990 and that the Committee should hold three more sessions at venues to be decided by the Committee;

8. Decides that the Preparatory Committee at its first session shall elect its Bureau, consisting of a Chairman, eight Vice-Chairmen and a Rapporteur, with due regard to equitable geographical representation;

9. Requests the Secretary-General, with the assistance of the Executive Director of the United Nations Environment Programme, to set up immediately a separate, independent and adequate Conference secretariat in Geneva and to appoint a Secretary-General of the Conference to head that secretariat;

10. Invites all States to take an active part in the preparations for the Conference and to establish broad-based national preparatory processes with active popular participation and to submit national reports articulating their views on, and commitments in regard to, the areas and issues to be considered by the Conference, including their perception of national priorities and needs and their expectations of regional and global institutions;

11. Recommends that the Secretary-General of the Conference should put forward suggested guidelines to enable States to adopt a common approach in their preparations and reporting;

12. Decides to establish a voluntary fund at the disposal of the Secretary-General of the Conference, for the purpose of supporting developing countries, particularly the least developed among them, to participate effectively in the Conference and in its preparatory process and invites Governments to contribute to this fund;

13. Invites the scientific community, industry and trade unions to take an active part in the Conference and its preparations;

14. Requests, in view of the important role of non-governmental organizations in promoting popular participation and raising environmental awareness, that non-governmental organizations concerned be systematically involved in the planning and programming of the Conference;

15. Invites the organs, organizations and programmes of the United Nations system, as well as relevant intergovernmental organizations, to contribute fully to the Conference and its preparation, including through the provision of expert advice and the secondment of staff;



16. Stresses the importance of holding of regional conferences on environment and development and urges the regional commissions of the United Nations to ascertain that the results of these conferences are introduced into the preparatory process for the 1992 Conference and to participate actively in that process.

## ANNEX II

### From the National Level to the Mediterranean Level: Suggestions for cooperation<sup>(1)</sup>

The hypotheses of the Blue Plan studies took into account, for the "alternative" scenarios, a consolidated policy of **environmental protection** and, especially, an improvement in its incorporation into development or physical planning policies.

However, the work also highlighted the fact that, even in the case of the "trend" scenarios, reference to policies followed over the years did not reflect reality in many respects, because the **effective application of government decisions** was far removed from the intentions expressed or laws passed.

24. In this respect the **biggest discrepancies** lie in the following areas:

a. **Control of urbanization:** the will to direct or curb urbanization through urban planning, land-use planning or guidelines on coastal development is sometimes thwarted or deflected by decentralization of the competent authorities. **Lack of supervision** and numerous "dispensations" have been observed as regards housing or tourism. Reality scarcely corresponds to the expressed intention to create protected areas or to shield some zones from urban encroachment. The coast in particular is increasingly subject to the **pressure of vested interests**. In 20 years nearly 2000 km of coastline have been sacrificed in this way, although this was not the intention at the national level.

b. **Supervision of productive or transport activities:** monitoring of industrial plants and disciplines as regards maritime transport do **not comply** with the relevant requirements. **Planning** and strategies concerning industrial waste are clearly inadequate, and its destruction, storage or transport are often a hazard. There is also a discrepancy between stipulations and practice as regards the monitoring of **degassing operations on ships in transit**.

c. **Waste-water treatment plants:** The level of **land-based pollution** requires adequate measures. And yet, aside from the major rivers, there is little evidence of real progress. On the coast, waste water **depollution rates** are rarely available, but **do not exceed 15%** on average. Many treatment plants are not in a suitable operating condition.

Nevertheless, despite the discrepancy between intentions expressed or programmes adopted and the reality of environmental practices, the Blue Plan studies show that decisions on the

(1) Reproduced from "The Blue Plan - Futures of the Mediterranean Basin" - Executive Summary and Suggestions for Action, UNEP/BP-RAC, Sophia Antipolis, 1988

bulk of environmental protection will be made, or not, largely at the level of the state. Essential legislation and standards will have to be established at this level, as well as the necessary mechanisms and institutions with the financing and competence to apply them (based for example on the "polluter pays" principle). The heterogeneity of geographical, socio-economic or cultural situations leads in the same direction: only states can stipulate and implement a suitable policy within their borders.

125. The intensification of efforts currently under way (trend scenarios), and even more the strengthening of environmental policy (alternative scenarios), implies a change of direction and a more goal-oriented action focusing in particular on:

- the strengthening of physical planning and programmes and, if necessary, the formulation and publication of "national and regional environmental protection plans" with deadlines set for objectives;
- the application of an approach by "scenario" for the establishment of coastal "charters", including the active participation of local institutions, socio-professional organizations and the population;
- the study of employment policies for young people and the contribution that could be made in this respect by taking into account the objectives of environmental protection and the more effective economic use of natural resources;
- the training of environmental experts able to ensure the link between scientific research, supervision or regulations, and the implementation of new development activities;
- raising the awareness of elected representatives and the officials of local authorities and national agencies working in the area of development or physical planning as regards environmental issues, and the creation, if necessary, of appropriate environmental institutions.

Without greater awareness on the part of the public about the interactions between, on the one hand, the environment and natural resources and, on the other, individual and collective activity, it will be futile to expect a rapid and smooth evolution towards satisfactory forms of sustainable development in the Mediterranean basin as a whole. More systematic and consistent efforts would therefore have to be undertaken to:

- develop general education concerning the Mediterranean environment with the help of teaching materials focusing on the realities and problems of the region;
- disseminate objective and serious information to the public about the possibilities and constraints of the local and regional environment in which they live, directed at various age groups and stressing the fact that one generation takes over from another;
- encourage national and local associations for environmental protection and landscape conservation, underscoring in particular tangible action and evidence of results.

...BUT BROAD FIELDS ARE OPEN TO MEDITERRANEAN CO-OPERATION.

126. The prospective study on the Mediterranean basin could only be initiated with the agreement of all the coastal states concerned, anxious not to be overtaken by their fate and the passing years as regards development and the environment, and no doubt also the role of their region in the world. In turn, this last part of this report is devoted to this co-operation between coastal countries, starting with issues likely to emerge, or become more pronounced, in the near future.

In accordance with the original intentions of the Blue Plan, some suggestions for intra-Mediterranean action, identified in the light of the scenarios and the accompanying studies, are therefore submitted to decision-makers, so they can assess their suitability for implementation. This could be based on multilateral or bilateral co-operation, on the establishment of exchange networks, on joint projects or on the development of solidarity.

#### A. THE PROGRESS OF KNOWLEDGE

127. Concerning data and statistics, it must be recognized that in the Mediterranean collecting and measuring mechanisms still provide a very inadequate basis for projections, analyses and choices. The statistics supplied by international organizations, which divide up this part of the world somewhat artificially into Africa, Western Asia and Europe are limited. Entire areas elude analysis, or are documented by unreliable data. This is the case, to take just a few examples, of data on relationships between air and sea pollution, endangered species, the quality of surface water and groundwater, domestic and even international tourism by coastal region, etc.

The establishment of some fifty series of comparable socio-economic statistics and a number of key indicators on the quality of the environment would be useful. The places where environmental data are gathered and processed should be better identified and their efficiency and accessibility improved. Networks accessible to each coastal country could also be established based on specialized, but well-connected, data banks.

In addition, experience has shown how difficult it was for a number of countries to obtain data concerning the Mediterranean regions as such and the coastline. The harmonization of statistical data gathering according to administrative districts, or appropriate spatial divisions (e.g. by watershed) could be the subject of collaboration among countries and would be of great help for future work.

The development of new techniques could facilitate or partly modify the measuring, gathering and processing of data and their presentation (automatic cartography, for instance). Remote sensing will contribute significantly to renewing monitoring techniques for plant life, the soil, the climate, the coastal strip and urbanization. Intra-Mediterranean co-operation for monitoring by "ecozones" with the setting up of pluridisciplinary teams, would make it possible to develop links, still very inadequate, between the production of basic images and the users, on the basis, for example, of the joint interpretation of some illustrative coastal sites\*, especially where monitoring networks have already been established.

As regards basic and applied research, the countries could identify gaps which exist between scientific knowledge and decision-making or practical application. Thus environmental meteorology, the study of complex, multi-purpose ecological systems, the clinical study of plant diseases, the rehabilitation of degraded ecological systems, the recycling of water resources, the application to agriculture of genetic discoveries concerning conservation or selection, etc., could be useful to all Mediterranean people. Without an active policy for the intra-Mediterranean dissemination of knowledge, the gaps are likely to widen between countries in, for example, the application of bio-technology to agriculture. The Blue Plan would have liked to have been able to give more consideration to the question of new technologies and their future role in the search for patterns of development that are more mindful of the environment.

In this respect, the Blue Plan work also lacked a study of social perception and behaviour, especially trends in demands and needs. Some existing social prospective studies (use of leisure time, food consumption, environmental awareness, etc.) showed that the forecasting exercises needed a social prospective, closely linked to culture. The establishment of a network, notably in the academic context, enabling the exploitation throughout the Mediterranean of studies and research undertaken, could improve the situation.

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\* Portugal has carried out this work for the whole of its national territory with the assistance of the European Communities : the cost was approximately one million dollars.

## B. CO-OPERATION ON MANAGEMENT AND THE ENVIRONMENT

128. **Concerted action** among Mediterranean states could, in this case, speed up the **strengthening of environmental policies** and especially their incorporation into development policies.

Some forms of co-operation could be based on **existing structures** : this is the case, for instance, of the General Fisheries Council of the Mediterranean, for fisheries, or of "Silva Mediterranea" for the forest; other structures remain to be **established** in areas where exchanges are still at a very low level. In this respect, the formation, on a formal or informal basis, of exchange and co-operation networks is quicker and more effective than **abolishing** new institutions.

The **Genoa Declaration** (1985) foreshadowed this kind of linkage for example by proposing the identification of 100 **historic sites** of Mediterranean interest, which were adopted in 1987, or 50 **new protected natural sites** on the coast. Those responsible for them are expected to exchange experiences within the context of MAP. Similarly, managers of the "biosphere reserves" meet within the framework of Unesco's Man and the Biosphere (MAB) Programme. The MEDPOL programme, which links about one hundred research and analysis laboratories, and the Priority Actions Programme, which gathers together specialists on specific subjects, operate in the same way.

A better idea of requirements can be obtained by specifically reviewing the main **possible** **aspects** of Mediterranean co-operation:

### 1. Co-operation on spatial management

129. **Coastal management** For reasons that were clearly stressed by the Blue Plan, **development of the Mediterranean coast** - including the islands - calls for an exchange of experience on national policies and development practices likely to **reduce pressure** on the coast, and encourage development of the hinterland.

Co-operation, particularly through comparative studies, could start with planning and development methods, conservation regulations, legal and financial protection mechanisms (coastal conservatories, for instance), promotion of awareness among tourists of environments to be protected, conservation of the near-shore seabed, the use of remote sensing, etc. **Meetings** between **officials** responsible for coastal regions would be very fruitful in this respect. The necessary information, exchange and training activities would be facilitated by

the establishment of a "Mediterranean Coastal Observatory" focusing its attention on the changes taking place in the coastal strip.

The current inadequate rate of installation of waste-treatment stations in coastal regions implies that the objectives of the Genoa Declaration may not be met. Even though measures are the responsibility of each state, at least a MAP questionnaire could be drawn up at the Mediterranean level, enabling preparation of a public overview of the situation and prospects for the next five years. An efficient co-operation network among port authorities could be useful for identifying problems and bottlenecks. The co-operation already under way between the European Community and the Mediterranean countries could help to complete port installations where they are needed for the application of the MARPOL Convention on degassing.

130. Urban management In 2025 more than 150 million people will be living in the towns of the Mediterranean regions (82 million in 1985). Collaboration among specialists could, in this case, focus mainly on the creation of new towns, control of the use of peri-urban areas where agricultural land is destabilized, economical urban transport, the protection and restoration of historical centres, the reduction of air pollution, the design of low-cost housing and public areas, small-scale urban systems in harmony with rural areas, etc. Urban management as such (waste, sanitation, water, traffic, plantings, etc.) could rise to exchanges through direct "technical twinning" between Mediterranean towns.\*

131. Water resources management The uncertainty and irregularity of water resources constitutes a real bottleneck for Mediterranean development, particularly for the southern and eastern countries.

Collaboration could focus on several aspects : resource management institutions, distribution of drinking water, sanitation techniques, water-saving irrigation techniques, re-use of waste water for agriculture, solar pumps, desalination of sea water, supply of water to small islands. The organization of internships and regional training courses for water resource management (domestic, agricultural and industrial uses, integrated planning and management) is a prime area for intra-Mediterranean co-operation.

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\* There are currently 360 twinings, of which only 45 between North and South and ten South-South. Less than a dozen twinings concern technical exchanges.

132. Forest management Co-operation could be very beneficial in the following areas: upkeep and testing of stable, multipurpose farm-forest cum grazing systems, management and protection of watersheds, multipurpose forest management (including for hunting), the succession process of different kinds of vegetation, diseases specific to Mediterranean trees, procedures for timbering by stages, (choice of trees for retimbering), combating of forest fires, techniques and equipment for clearing undergrowth, exploitation of by-products, alternatives to fuelwood. Here again the organization of specialized regional internships and training courses could be encouraged.

133. Management of protected areas The rich genetic heritage of the Mediterranean region, as regards both wild species and cultivated or domestic varieties, is seriously threatened. The application of the Barcelona Convention protocol on "specially protected areas" and the work of the Salambo (Tunisia) Regional Activity Centre should help to develop the protection of coastal and marine regions. In co-operation with the International Union for the Conservation of Nature and Natural Resources (IUCN), it is essential to extend action to all the Mediterranean-climate land ecosystems in the region, particularly, through the expansion and improvement of the biosphere reserve network, the creation of biotope reserves and the adoption of a regional conservation strategy. The conservation of outstanding sites and Mediterranean landscapes should bolster this effort to conserve ecosystems, and could also be an area of co-operation. The participation of local populations in the management of protected areas is essential, and could also offer an opportunity for an exchange of experience.

134. Management of marine living resources Although they are not abundant, Mediterranean living resources could contribute to reducing the food dependency of some coastal countries if exploitation were carried out in a rational way so as to be sustainable. This kind of objective requires effective international co-operation, for which the General Fisheries Council of the Mediterranean provides a sound framework, but which should be stepped up and suitably co-ordinated with the action of other sectors such as transport or pollution control. Information about existing fish stocks (demersal and pelagic species), their migration and reproduction cycle (especially in the less studied eastern basin) is essential for optimizing fisheries. A joint assessment of migrant species should also be encouraged. Above all, priority should be given to concerted action between countries exploiting the same resource, and the formulation, if necessary, of measures to limit fishing activity and ensure distribution of this resource, together with supervision of the effective application of measures. Legislation on use of the coastal strip through artificial reefs and, in general, national management and development plans for fisheries should be harmonized as far as possible.



## 2. Co-operation on appropriate technology

135. The establishment of new industries in the south and east of the basin in particular will create an urgent need for information on precautions to be taken on installation, recycling, and depollution devices. It will be equally useful, however, to exchange the mechanisms and processes of "clean technologies" introduced into industrial processes, which make it possible - often with economic benefit - to reduce waste, save materials and energy, and re-use by-products. This could offer a broad area for exchange and co-operation between specialists from the north and south, in fields such as energy, water, biotechnologies or waste, which may possibly receive support from the European Community.

## 3. Co-operation on major hazards

136. Erosion of the genetic heritage The Mediterranean bovine, ovine and caprine domestic races amount to only 10% of what they were a century ago; populations of shrub species and plants that are part of the traditional diet are rapidly disappearing. The urgent establishment of biological conservatories, gene banks, botanical gardens and biosphere reserves, covering the land ecosystems of the Mediterranean region, will alone contribute to conserving ex situ and in situ the components of the wild or domestic genetic heritage of the region in order to maintain, for information, the domestic varieties and wild fellow-creatures essential for the genetic selection of varieties needed for agriculture and stock-farming in the future. A Mediterranean network of botanical conservatories and arboretums could be established. A Mediterranean association for the protection of nature could prove useful.

137. Natural hazards Natural telluric hazards have always existed in the Mediterranean, whether earthquakes, volcanic eruptions, or landslides. Moreover, the irregularity of the climate causes floods and recurring disastrous droughts. Solidarity is all the more effective in these spheres as it concerns neighbouring countries likely to be affected, in turn, by the same calamity. Studies on seismic hazards undertaken in the region under the auspices of UNDP, Unesco and PAP could be fruitfully extended to the Mediterranean basin as a whole. Work carried out on drought and agroclimatology is also an important area for regional co-operation.

138. Technological hazards Technological hazards are becoming increasingly serious in the Mediterranean basin with the development of industrialization, the manufacture and transport by land and sea of new chemical products, the increase in toxic waste, the production of nuclear energy, etc. Co-operation could focus on prevention techniques and practices, identification and marketing of new products (pesticides in particular), adoption of suitable legislation, measures to be taken in case of accidents, or transborder co-operation among

local authorities. All coastal states could take advantage of the progress made by some industrialized countries, and of European collaboration, already under way. Broadening the fields of competence of the Malta Centre coincides with this recognition of new risks as regards maritime accidents.

Among the top priorities is co-operation on industrial waste, particularly toxic waste (destruction, transport, storage, reprocessing, etc.). The organization of regular contacts among industrialists, in co-operation with public authorities, would be a positive step.

### C. FROM COLLABORATION TO MEDITERRANEAN SOLIDARITY

139. The work of the Blue Plan has often highlighted the need for collaboration much further upstream in a number of major sectors of economic activity, as a prerequisite for a true Mediterranean solidarity.

In this respect, it was observed that bilateral relations between states only marginally covers environmental problems. These issues should be given more importance in bilateral scientific, technical or commercial agreements between Mediterranean countries.

Relations between neighbouring countries have to be facilitated to achieve better international balance: maritime, and also air and road transport, electrical interconnections, communications, etc. A network of exchanges should link up the Mediterranean basin, where currently preference is given to relations along certain main lines, whose lesser ramifications tend to stagnate. The situation can be improved by strengthening short-distance relations, still too limited, particularly among southern countries.

At the regional or international level, increasingly numerous forms of collaboration are pursued within organizations in which the Mediterranean States find themselves involved in decision-making processes that do not pay sufficient attention to the Mediterranean identity, especially the distinctive features of the Mediterranean environment. Very different kinds of international organizations, such as FAO, WHO, Unesco or world development organizations (World Bank, UNDP), are collaboration or decision-making levels in which the Mediterranean countries participate, but are a minority and never form a group. It would be appropriate for these bodies to take the special nature of the Mediterranean into account as far upstream as possible, on the basis of prior consultations, for instance in the MAP framework. The concerns of the Mediterranean countries would benefit from being better known before the adoption of environmental policies by these organizations. The same holds true for regional organizations, such as the European Community or the League of Arab States in which some countries of the region participate. Three major areas of economic

activity: food and agriculture (resources and consumption), energy and tourism seem in this respect suited to a more advanced form of collaboration.

140. Food and food resources should be given special consideration. In forty years self-sufficiency levels in the Mediterranean regions have fallen from 60% to 40% or even 30%. In order to halt or reverse this trend, a stronger kind of solidarity, which would avoid a rupture with its many repercussions, including on the environment, should be the subject of intra-Mediterranean collaboration and co-operation with other regions (of Europe in particular).

The drop in self-sufficiency in Mediterranean countries, which appears unavoidable in the short- and medium-term raises the issue of food security for these countries. Suitable financial or commercial co-operation would facilitate orderly specialization in production and would justify an intensification which, properly managed, would exert less pressure on the environment. More intense co-operation in agronomic and agroecological research would be useful (soil fertility, water use, creation of varieties and conservation of species, etc.). A priority research and development programme on products subject to shortage (cereals, oil seed, etc.) or to strong demand (fruit and vegetables) would be welcome. The same kind of approach is valid for stock-farming. Co-operation on fisheries and aquaculture, to the point of establishing regulations to be observed, is essential.

141. Energy is another sector where effective collaboration could start up rather quickly. The differences between oil consumer and producer countries will tend to dwindle with time, and all countries have experienced or will experience the vigorous development of electricity. Electrical energy is therefore a special area for the exchange of experience and know-how, particularly on supply, on clean combustion techniques, etc. The use of natural gas, already significant and a link between various Mediterranean countries, could increase considerably. Co-operation could focus on exploitation (deep drilling), production (small deposits) and utilization techniques (efficient industrial uses, chemicals such as methanol, combined electricity production, fuel gas, etc.).

Knowledge acquired on solar energy and other renewable sources of energy could, in the end, create a true technological bridge between north and south and strengthen South-South co-operation, particularly on equipment for water (irrigation pumps), dispersed dwellings, production of baked clay materials, the drying of agricultural products, etc.).

142. Finally, for tourism, rapidly developing in a somewhat haphazard way, in which all Mediterranean countries compete, collaboration could first focus on information about

**demand and occupancy rates** in the region (where the margin of error for figures exceeds 30%). It could also concentrate on the **improved management** of intra-Mediterranean tourism, which currently accounts for 25% of international tourism (**tariffs and air services**, and especially the **staggering of peak periods** through "time-planning"). It could involve the concerted appeal to tourism outside the Mediterranean. Finally, if it were recognized that foreign tourists are willing to contribute to **protection of the Mediterranean**, and that \$5 per one-week stay would bring in more than \$250 million, the establishment of a **voluntary contribution**, which could only be set up at the Mediterranean level, could have a **considerable impact**, especially if it were supplemented by a parallel contribution from the countries involved. Generally speaking tourists, who benefit greatly from the quality of life and the Mediterranean landscape, must be invited to make a **tangible contribution** to their protection.

#### D. A PROGRAMME FOR THE YOUNG GENERATIONS

143. The future of the Mediterranean may be seriously affected or modified by the implementation of policies for the education, information and awareness-heightening of the **young public - tomorrow's generations**. The young public in particular is not always aware of the time needed for a tree to grow, to manage a forest, or make the soil fertile and save it from desertification. It is not always aware of the **fragility of the world it has inherited**. This area could be the subject of fruitful exchange between coastal countries : handbooks for young people, teaching experiences in the field, and television programmes. It would be useful to take stock of public action undertaken and show that its effect may be decisive (for example, to increase waste-water treatment from 20% to 30% in ten years).

State policy and its implementation, together with policies of local authorities, are too little known and publicized. It would therefore be useful to **disseminate** information among Mediterranean people about **efforts undertaken** in countries other than their own. Stimulation among countries, cities and associations could mobilize some people or bolster the efforts of those who, in the sphere of the environment, occasionally feel isolated. The launching, in 1988, of the "International Week for the Mediterranean" is a step in this direction, but its scope is still too reduced.

Raising the awareness of young people about the fragility of the environment is one aspect: **entry into working life** is another. Joint efforts will therefore have to be made for **training in environmental professions**, and even more in the professions which must take into account basic concepts about the environment. In this respect, the training of town planners, engineers and technicians is one of the most fruitful means of North-South co-operation, one of the easiest to implement, and the one whose results will prove to be the most useful. This

ookind of **co-operation for training**, already under way among Mediterranean countries in some areas, could be developed for all areas of environmental protection, resource management, or any other field identified above.

**Sombre employment prospects** also raise the increasingly difficult problem of the **incorporation of the young people into working life**. **Communal work schemes** mobilizing youth are being tried out in various places. Environmental protection can and must be given an important part in these initiatives, with the organization of exchanges and internships among countries, facilitating effective participation in tangible action.

144. It is not easy to grasp the **extent of the changes** which will take place in the Mediterranean basin during the **next forty years**. Perhaps it can be better understood if one considers that **60% of the people who will be living in the Mediterranean in 2025 are not yet born**. These **325 million** or so Mediterranean people of the future will perhaps not have the same cultural and material references as the present generations, but their **basic needs** will not be very different from ours. It is the present generations whom they will hold accountable for the environment they find. It is for the Mediterranean people of today to take immediate action to **counter adverse trends and to prepare an acceptable future for themselves and posterity**.

ANNEX III

Commitments arising from treaty obligations

Barcelona Convention

1. The Convention itself can be viewed as an umbrella agreement providing a general obligation "to take all appropriate measures... to prevent, abate, and combat pollution of the Mediterranean Sea area and to protect and enhance the marine environment in that area".

Protocol concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Case of

2. In the case of release or loss overboard of harmful substances in packages, freight containers, portable tanks or road and rail tank wagons, the Parties shall co-operate as far as practicable in the salvage and recovery of such substances so as to reduce the danger of pollution of the marine environment.

3. Any Party requiring assistance for combating pollution by oil or other harmful substances polluting or threatening to pollute its coasts may call for assistance from other Parties, either directly or through the regional centre referred to in article 6, starting with the Parties which appear likely to be affected by the pollution. This assistance may comprise, in particular, expert advice and the supply to or placing at the disposal of the Party concerned of products, equipment and nautical facilities. Parties so requested shall use their best endeavours to render this assistance.

4. Where the Parties engaged in an operation to combat pollution cannot agree on the organization of the operation, the regional centre may, with their approval, co-ordinate the activity of the facilities put into operation by these Parties.

5. Assistance may be required for National Contingency Plans, to operate effectively in developing coastal States.

Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources

6. The Parties shall, directly or with the assistance of competent regional or other international organizations or bilaterally, co-operate with a view to formulating and, as far as possible, implementing programmes of assistance to developing countries, particularly in the fields of science, education and technology, with a view to preventing pollution from land-based sources and its harmful effects in the marine environment.

7. Technical assistance would include, in particular, the training of scientific and technical personnel, as well as the acquisition, utilization and production by those countries of appropriate equipment on advantageous terms to be agreed upon among the Parties concerned.

8. Such assistance and transfer of technology may concern, initially, those substances for which interim environmental quality criteria or emission standards have been adopted and relate to the industries and industrial processes involved:

- environmental quality criteria for bathing beaches
- required treatment plants for coastal cities over 100,000 population
- required marine outfalls for coastal cities over 10,000 population
- environmental quality criteria for shellfish waters
- emission standards for mercury.

9. Assistance may also be required for the measures already proposed and likely to be adopted by the sixth ordinary meeting of Contracting Parties e.g.:

- used lubricating oils
- cadmium and cadmium compounds
- organotin compounds
- organohalogen compounds

#### Protocol Concerning Mediterranean Specially Protected Areas

10. The Parties shall, directly or with the assistance of competent regional or other international organizations or bilaterally, cooperate, on the entry into force of this Protocol, in formulating and implementing programmes of mutual assistance and of assistance to those developing countries which express a need for it in the selection, establishment and management of protected areas.

11. The programmes contemplated in the preceding paragraph should relate, in particular, to the training of scientific and technical personnel, scientific research, and the acquisition, utilization and production by those countries of appropriate equipment on advantageous terms to be agreed among the Parties concerned.

12. Bilateral and multilateral programmes can utilize information developed within MAP, including the

- List of existing SPAs, the
- List of proposed SPAs, the
- Action plan for the protection of Mediterranean Monk Seal (Monachus monachus) and the
- Action plan for the protection of the Mediterranean marine turtles.

Genoa Declaration

In 1985, in reviewing their cooperation over the previous ten years, the Contracting Parties noted that the political will and solidarity of all countries are already in place, decided to launch a new phase of their cooperative efforts and adopted additional priority targets to be achieved during the second decade of the Mediterranean Action Plan (1985-1995).

- Port reception facilities required in the 156 Mediterranean ports, as proposed by UNEP, IMO and EEC;
- Identification and protection of 100 coastal historic sites of common mediterranean interest (list approved by the Contracting Parties);
- Application of environmental impact assessment to ensure proper development activities;
- Improvement of safety of marine navigation;
- Improved disposal of solid waste;
- Prevention of forest fires, soil loss and desertification;
- Reduction of air pollution.



ANNEX IV

Envisaged workplan through the MAP structure

The following timetable and supplementary budget is envisaged for the preparation:

	1990	1991
- Consultants for the preliminary costs of a full-scale Mediterranean Cooperation Programme	30	-
- Review by the Socio-economic Committee in 1990	-	-
- If a meeting of Government designated experts is envisaged instead	30	-
- Review and adoption by the Seventh Ordinary Meeting of Contracting Parties	-	-
- If a special session of the Expanded Bureau is envisaged instead		55
- Translation into UN official languages		21
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