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# GUIDELINES FOR IMPLEMENTATION AND FOLLOW-UP OF MCSD RECOMMENDATIONS AND PROPOSALS FOR ACTION

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## GUIDELINES FOR IMPLEMENTATION AND FOLLOW-UP OF MCSD RECOMMENDATIONS AND PROPOSALS FOR ACTION DRAFT

#### **SECTION 1:**

#### **OBJECTIVES AND GUIDING PRINCIPLES**

#### A. Objectives

The objectives derive from the commission's mandate and from the decisions and recommendations adopted by MCSD at its various meetings. The main objectives are to:

- (a) evaluate the effectiveness of follow-up of decisions of the Contracting Parties;
- (b) contribute to rationalization of the intergovernmental decision-making capacity in the Mediterranean for integration of environmental and development issues;
- (c) strengthen the capacity of MCSD to make proposals and recommendations and to formulate and implement regional strategies for sustainable development in the Mediterranean;
- (d) facilitate an exchange of information among institutions implementing activities related to sustainable development in the Mediterranean basin;
- (e) contribute to the enhancement of regional cooperation in the Mediterranean:
- (f) provide elements for the establishment of a system of reports on implementation of recommendations and proposals;
- (g) improve communication and the exchange of information among the MCSD partners;
- (h) contribute to greater visibility of implementation of recommendations and proposals for action adopted by MCSD.

#### B. MCSD terms of reference

The MCSD terms of reference require the Commission "to identify, evaluate and assess major economic, ecological and social problems set in MED Agenda 21, make appropriate proposals to evaluate the effectiveness of follow-up to the decisions of the Contracting Parties and facilitate the exchange of information among the institutions implementing activities related to sustainable development in the Mediterranean." The Commission should also enhance regional cooperation and rationalize intergovernmental decision-making capacity in the Mediterranean basin for integration of the environment and development. The Commission should assist the Contracting Parties by making proposals for the formulation and implementation of a regional strategy of sustainable development in the Mediterranean and "to undertake a four-year strategic assessment and evaluation of the implementation by the Contracting Parties of MED Agenda 21 and decisions of the meetings of the Contracting Parties relevant to sustainable development in the Mediterranean region and propose relevant recommendations thereon." guidelines presented in this document are in line with the purposes and functions of MCSD as defined in its terms of reference. They also fulfil obligations concerning the evaluation of the effectiveness of follow-up to the decisions of the Contracting Parties and provide elements for rationalization of intergovernmental decision-making capacity in the Mediterranean basin for integration of environment and development and provide insights about shortcomings.

#### C. Work programme and related recommendations and proposals

At its first meeting, MCSD identified eight themes on which to focus attention: (a) management of water demand, (b) sustainable management of coastal areas, (c) tourism and sustainable development, (d) information, public awareness, environmental education and participation, (e) indicators of sustainable development, (f) free trade and the environment, (g) industry and sustainable development, and (h) management of urban development. At that time, the first two themes were considered to be areas for immediate action because preparation had already been completed that would permit the development of policy and strategy proposals in time for submission to the third meeting of MCSD (Sophia-Antipolis, 20-21 February 1997).

The Commission decided to establish thematic working groups with task managers and support centres for each theme. It was the responsibility of the task managers and support centres to obtain the required financial and human resources as well the expertise required for dealing with the themes. The thematic working groups were to submit draft recommendations to MCSD for consideration. The Contracting Parties were solely responsible for implementation of any recommendations adopted. Nevertheless, since some themes were appropriate for inclusion in strategic action programmes, the Secretariat could propose ways for the Contracting Parties to implement recommendations.

At its third meeting, MCSD adopted a set of recommendations and proposals for action concerning the management of water demand and the integrated and sustainable management of coastal areas. These recommendations and proposals were later adopted by the Contracting Parties at their tenth meeting (Tunis, November 1997).

Progress made by the other six thematic working groups was reviewed at the fourth meeting of MCSD (Monaco, 20-22 October 1999). At that same meeting, MCSD requested the Secretariat to prepare a series of options for following up recommendations to be reviewed at the next meetings of MCSD and the Contracting Parties. This approach and follow-up of recommendations were further discussed at the fifth meeting of MCSD (Rome, 1-3 July 1999). It was stressed that the main objectives of the activities should be stated for each theme and that each working group should keep in mind the operational requirements for implementation of recommendations. Also during the fifth meeting, MCSD agreed on a series of recommendations and proposals for action related to the themes of information, public awareness, environmental education and participation and indicators of sustainable development. Later, the MCSD Steering Committee agreed on recommendations and proposals for action concerning the theme of tourism and sustainable development. The Steering Committee also approved and encouraged carrying out pilot studies, particularly twinned studies, for implementation and follow-up of MCSD recommendations. The three sets of recommendations prepared by MCSD at its fifth meeting were then adopted by the Contracting Parties at their eleventh meeting (Malta, October 1999).

At its fourth meeting (Corfu, 22-23 June 2000), the MCSD Steering Committee noted that the use of pilot projects could be used to test provisions for implementing recommendations and supported this approach. At its fifth meeting, MCSD agreed on criteria to be used to select new themes for the next MCSD work programme and the corresponding pre-feasibility studies.

Because the revised Barcelona Convention requires taking into full account MCSD recommendations adopted during their ordinary meetings, the Contracting Parties were invited to adopt concrete provisions to ensure that the proposals for action reach the adhoc institutional structures as well as the government and other institutions affected by this issue (UNEP(DEC)/MED WG.170/3). The Contracting Parties were also requested to give priority to implementation of recommendations and proposals for action adopted or to be adopted within the MCSD framework, establishing clear objectives and providing adequate means. In turn, the participants in the Mediterranean Action Programme were invited to become more involved in MCSD activities, particularly in themes for which they have a support centre.

#### D. Questionnaires and pilot studies

In conformity with MCSD's remit and taking into account the discussions and recommendations of the meetings of the Contracting Parties, MCSD and the MCSD Steering Committee, the Secretariat launched a process for assessment of implementation of MCSD recommendations and proposals and for preparation of guidelines for their implementation and follow-up. These guidelines were based on a series of questionnaires sent to all MCSD members and the Secretariat. Simultaneously, the Secretariat commissioned the preparation of short pilot studies in the following areas: management of water demand, the integrated and sustainable management of coastal areas, and tourism and sustainable development. Assessment of activities related to implementation of recommendations in the themes of indicators of sustainable development and information, public awareness, environmental education and participation was based on relevant follow-up activities by the Blue Plan/Regional Activity Centre and MAP/MEDU (including an analysis prepared for a regional workshop on information, awareness and participation in the field of the environment and sustainable development in the Arab region with support of the European Union) and the output of that workshop.

#### E. Framework and guiding principles

A methodological framework and guiding principles were adopted by the MCSD Steering Committee, which noted that the strategy must spell out specific goals and objectives for each key issue. Although the guiding principles would be general in nature, they should be adapted to each specific issue dealt with by MCSD. This approach is essential for implementation of the strategy because it would help focus understanding of the strategical implications, provide a yardstick with which to measure progress and help monitor and assess implementation of the strategy. The objectives and principles should be well defined and, whenever possible, measurable so as to enable monitoring and evaluation. An effort should be made to identify key aspects (geographic scope, main issues, interrelations, etc.). The identification of key aspects and their integration into the sub-strategies would provide specific and practical steps and would also facilitate monitoring and evaluation. An effort should be made to identify ways and means for satisfactory implementation in light of possible constraints. Breaking down the strategy into sub-strategies for each specific issue would help to make it more operational. The sub-strategies should be formulated in sufficiently clear terms in order to render them formally operational, so that their consequences can be worked out in detail. The substrategies should identify actions related to policy, legislative, institutional and organizational issues; decision-making instruments or measures, such as environmental assessment, cost-benefit analysis, EIA and risk analysis; specific ad-hoc programmes and pilot projects; economic measures, subsidies and taxes incentives; and available means, including financial and technical resources. The participation of interested parties is essential for all tasks identified by the strategy, although participation could take on different forms in each case. Participation would be greatly facilitated by dissemination of information and effective communication. Several actions would need continuity through proper monitoring and evaluation, using indicators as appropriate. The strategy should anticipate likely obstacles. However, not all constraints can be anticipated; therefore, the strategy should be flexible to face these contingencies and find adequate solutions.

#### **SECTION 2: OVERVIEW OF THE CURRENT SITUATION**

#### I. THEMATIC RECOMMENDATIONS AND PROPOSALS

#### A. Management of water demand

The MCSD recommendations and proposals adopted by the Contracting Parties refer to effective incorporation of water demand management in national water strategies and development and environmental policies. They seek to develop an awareness of the importance of loss and waste of water and to promote a sense of responsibility among users. They also seek to improve knowledge and awareness of the potential advantages of the economical management of water demand among managers, economic stakeholders, decision makers and the general public and to undertake practical demand-control activities by encouraging cooperation among groups of countries facing the same demand problems and future shortages.

#### 1. Implementation

Eighteen countries replied to the questionnaire sent out by the Secretariat. Fifteen countries declared having implemented a national water strategy or water plan, one country declared having partially implemented a strategy and two countries had not yet implemented a water strategy or water plan. In all cases, the water strategy or water plan included sectoral policies, and three quarters of the countries specifically promote investment in water economy and water-efficient use, primarily in agriculture and industry. An awareness and education campaign was included in national water strategies or plans The Secretariat assisted Contracting Parties to implement in 15 countries. recommendations and proposals on the management of water demand by providing guidelines for the incorporation of water demand management into national development and environmental policies. Another form of assistance provided by the Secretariat is assistance to local projects dealing with water resource management and the distribution of the results of these projects. The Secretariat, particularly the Blue Plan/Regional Activity Centre, participates in projects in five Mediterranean countries for integration of the management of water demand into national strategies and plans. It prepared a report on the water policies of 11 Mediterranean countries and has implemented the Polagwat project supported by the European Commission (DGXII) in cooperation with national

The Blue Plan has prepared case studies on water-value, water-saving and water-scarcity issues. In this context, the Blue Plan produced the document "Mediterranean Water Vision" and other material for distribution. It has cooperated with

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intergovernmental organizations (FAO, IPTRID and CIHEAM) on the management of water demand. Irrigation has been the subject of several activities, including the Polagwat project and specific projects with several countries in the Mediterranean basin for improving irrigation efficiency. The Blue Plan has also contributed to the gathering of water statistics and water indicators in 12 countries bordering the southern and eastern Mediterranean (project MEDSTAT) and has initiated training activities on this subject. Statistics on water in the Mediterranean have been published. The Blue Plan intends to continue and strengthen ongoing activities for enhancement of the knowledge and capabilities of the countries involved in MEDSTAT. It is planning to intensify the exchange of experiences and know-how among Mediterranean countries on water issues, notably on the management of water demand and preparation of indicators and environmental statistics.

#### 2. Ways and means of implementation

Specific pilot projects for efficient use of water have been implemented in 13 countries, while all but one country have projects for improving the efficient use of water. The most frequent steps have been the adoption of new water management practises (one out of four countries), followed by new systems for controlling water distribution (slightly less than one out of four countries) and adoption of new irrigation systems (one out of five countries). A system of weighted prices and surcharges has been established in one fourth of the cases, and privatization of water distribution systems is a policy followed in two countries on the northern edge of the Mediterranean. The most frequent approach is to take into consideration simultaneously the specific characteristics of a country. For example, in arid and semiarid areas where extensive irrigation systems and agriculture are the most important users of water, measures to improve and manage irrigation systems have greater importance than in countries were agriculture consumes less water.

One important control measure adopted is auditing and controlling leakage through detection of leaks, their repair or replacement of galvanised iron distribution networks by new polyethylene pipes, controlling pressure and new practices for managing network infrastructure. Case studies reveal that leakage control has proven to be one of the main factors leading to significant reduction in water demand. Associated with leakage control measures is the increasing use and modernization of metering systems. Metering seems to have an important influence on customers. It has the disadvantage of requiring a large bureaucracy for registration, control and collection of consumption data. The use of automated meter reading attempts to reduce bureaucracy and increase flexibility and efficiency.

Control systems are frequently coupled with a water pricing policy. It has been proven that pricing can be an effective water-demand management tool. Implementation of a water-price system presents some difficulties, however, such as how to establish a tariff system that, on the one hand, guarantees equal access to water for all sectors of the population irrespective of a capacity to pay and, on the other hand, that covers operational costs, maintenance, depreciation, interest and other costs. It is a reality that water prices often barely cover operating expenses. Different tariffs are often used depending on the final user and type of water consumed. A distinction can be made between systems that provide drinking water and systems that supply water for agriculture or for use in the industrial and energy sectors. Distribution infrastructures are different, the quality of water is different and the tariff systems should be guided by different criteria. Prices and conditions should vary in accordance with the type of

consumer. In the case of drinking water, the system can be relatively simple with a single tariff based on consumption. Yet in some cases, the tariff is based on a price per dwelling adjusted to take into account the number of rooms, family size and property value. This differentiating tariff system is often combined with a scheme that subsidizes the use of low-water-consumption devices.

In order to assist countries in their efforts to integrate water resource management and urban management and to advise on how to stabilize water supply for urban dwellers, the Secretariat has prepared draft guidelines for the management of urban water resources.

In the productive sectors, there are charges for wastewater discharge, prices for water withdrawal for agriculture or for water withdrawal for energy purposes. More sophisticated and complex systems have been tried. For water use in agriculture, systems can charge various prices based on the crops cultivated, thus subsidizing water-intensive crops or less-water-intensive crops. Specific projects related to water use have been established as instruments to apply a package of measures in certain well-defined sectors or economic activities, such as irrigation projects. When successful, these projects have contributed to more rational use of water through a reduction of the time required for irrigation, the number of pumps used and the cost of operating pumps, promoting equity in water distribution as a mechanism to introduce new practices and technologies, increase water distribution efficiency and marginally reduce water consumption.

In the industrial sector, tariffs can be based on the amount of effluents. In this case, the tariff system is combined with the metering of water intake in order to ensure that extra water is not used to dilute the effluent. Another possibility is to charge a tariff based on the effluent load. This approach tends to encourage recycling to improve the quality of the effluent and to reduce overall water use. Still another alternative is the use of effluent permits that promote regulation of the effluent load or that are tradable as pollution certificates. In some cases, tariffs can be combined with regulation of supply through quotas for specific industries or types of farmers. Subsidies are frequently used as a tool in water-pricing systems.

Promotion of investment in industry and agriculture to stimulate rational use of water and to decrease water use has been adopted in some countries through financial assistance schemes. In the case of water for agriculture and industry, subsidies are sometimes provided for equipment and materials needed to line canals. This measure, together with the introduction of water-saving technologies and recycling technologies, has already contributed to a reduction in the use of water in the industrial sector of several countries despite an increase in industrial production. This has been facilitated in some cases by the adoption of new environmental management practices by individual firms (e.g. the European Eco Management Scheme, EMAS).

The water requirements of natural ecosystems, although essential for their existence, are rarely considered in current legislation and mechanisms. Nonetheless, some countries have established regulations on the minimum level of rivers and water courses.

#### 3. Implemented activities

The specific institutions responsible for implementation of these activities depend on the specific institutional structure of each government and the type of measure implemented.

In general, the central government plays a crucial role through various ministries (agriculture, environment, industry). In some countries, a specific ministry for water resources exists, although more frequently water management is the responsibility of the ministry of agriculture or the ministry for the environment. In a few countries, it is the competence of the ministry of public works. In many countries, basin authorities or committees deal with all aspects of water management in each basin.

Involvement of all parties concerned in water management activities is explicitly provided for in the water strategy of some countries. This includes not only agencies of the central or regional governments, municipalities and basin authorities but also public and private water users, including farmers, and farmers associations, water users associations, irrigation associations, citizens and industries. The mechanism most frequently adopted for promoting broad participation is the creation of inter-ministerial advisory and technical committees. About three quarters of the NGOs that replied to the Secretariat's questionnaire participate in formulating programmes and strategies related to water demand. In general, NGOs are relatively active in creating water regulation programmes.

Implementation of a metering and tariff system for drinking water is often entrusted to local authorities and municipalities. In some cases, public water management agencies have been created or enhanced.

As already mentioned, 15 countries among the respondents have implemented educational, awareness or information programmes. These activities include distribution of information to teachers and promotion of events, such as theatre performances, fairs and seminars, targeted to specific audiences. At the level of the general public, there are campaigns that distribute information on water-saving practices that benefit from the participation of municipalities. The publication and distribution of information has been stimulated by the Aarhus Convention and an increase in the participation of Mediterranean countries in the Euro-Mediterranean Water Information System.

#### 4. Constraints

Water is an extremely sensitive issue involving several economic sectors, geographical areas and social groups. As a result, it is often the object of conflicting demands. Although price can be an effective tool for influencing demand, it is also true that water tariffs are politically sensitive and socially controversial. For example, a sudden increase in the price of water has frequently led to social and political unrest. Water tariffs and distribution policies are always subject to strong social and political pressure. A waterpricing system encounters difficulties in obtaining investment to adapt the system to measuring requirements. It is difficult to determine adequate but equitable tariffs, and there is a need for a large bureaucracy to administrate such a system. Moreover, water markets are often poorly developed in the Mediterranean region. Water has traditionally been managed from the point of view of supply. Conventional water policy seeks to increase supply and correct any shortcomings in water supply through expansion of infrastructure. This approach is deeply rooted in policy makers, administrators and consumers. To change this attitude and implement a strategy based on decreasing demand is a slow and difficult process. As long as the established supply approach is able to maintain an acceptable supply of water and satisfy increasing demand, it is difficult to change attitudes and adopt management based on reducing demand. Efforts to improve water-demand management and save water will not be adopted unless water supply is restricted, is inadequate or there is a drastic increase in the price of water.

Many decisions concerning water supply involve other sectors of the economy that may make decisions that work against the water-demand approach. For example, a decision to cultivate certain crops depends on markets and fiscal incentives. The crops selected based on market decisions may be water intensive rather than water saving. Crops may be chosen primarily because of the European Union common agriculture policy or because of bilateral agreements on agricultural exchange with countries of the Eastern and Southern Mediterranean. In areas of expanding tourism, a greater volume of water is required not only for direct human consumption but also for recreational activities (e.g. golf courses).

In many countries, the management of water demand was begun before the creation of MCSD and before adoption of recommendations on the management of water demand. In some cases, management activities were initiated before the early 1990s, creating institutional, legal and administrative structures that do not facilitate implementation of the MCSD recommendations. Additional constraints on the introduction of new management strategies are the unequal technical and economic capabilities of countries.

#### B. Integrated and sustainable management of coastal areas

MCSD recommendations on integrated and sustainable management of coastal areas seek to:

- (a) improve institutional mechanisms for the integrated management of coastal areas:
- (b) use legislative and regulatory instruments;
- (c) ensure access to information in order to raise awareness and promote training;
- (d) establish subsystems of incentives for the integrated management of coastal areas:
- (e) develop practical pilot projects for the management of coastal areas:
- (f) increase opportunities and improve the effectiveness of active participation.

#### 1. Implementation

Institutional, legislative and regulatory instruments and mechanisms for the integrated management of coastal areas have been adopted in two thirds of the countries, while two additional countries have established partial measures. Of the measures adopted, slightly less than half are legislative and about 15 per cent are related to land use, physical planning or policy provisions concerning urban development, tourism or industrial and agricultural development. The Secretariat, through the Priority Actions Programme/Regional Activity Centre, has conducted an extensive analysis of national legislation related to the management of coastal areas in MCSD member states in order to identify current situation and to propose recommendations on the introduction of framework legislation specific to coastal areas. On the basis of replies to a questionnaire from 16 countries and the European Union, a set of principles in support of an integrated coastal area strategy has been formulated. In addition, the Secretariat has provided guidelines for the design and implementation of regulatory instruments.

New institutions, committees or ad-hoc programmes have been created in 15.4 per cent of the countries. The creation of new and additional instruments and mechanisms for the integrated and sustainable management of coastal areas is being considered by slightly fewer than two thirds of the countries. In two out of five cases, the new mechanisms will

be legislative. In some cases, there will be further development and improvement of existing legislative mechanisms, while in others completely new mechanisms will be created. Other instruments and mechanisms planned are physical planning, land-use master plans, delimitation of marine areas and specific projects.

#### 2. Ways and means of implementation

The most frequent type of action is the design and implementation of integrated projects for the management of coastal areas. About two thirds of the Mediterranean countries use this approach. In some cases, these projects are integrated into or complement regional programmes. Practical pilot projects on integrated coastal management have received assistance from the Secretariat (the role of Priority Actions Programme/Regional Activity Centre as a coordinator of coastal area management projects (CAMP) has been already noted), which has also assisted countries to identify and define critical coastal areas.

Regional programmes for the integrated and sustainable management of coastal areas have been planned or are being implemented by 28 per cent of the countries. Furthermore, nearly 28 per cent of the countries declared having implemented incentives that range from the establishment of delimited areas, the provision of financial aid or technical assistance for the creation of protected areas. In two countries, there were no incentive programmes, projects or regional programmes for integrated coastal management. In many countries, there are projects dealing with specific issues affecting coastal areas. These projects cannot be considered part of a regional programme of integrated and sustainable management of coastal areas or to be projects for integrated management. They are projects on prevention and control of marine pollution, rehabilitation of the coastline, rehabilitation of coastal wetlands, the control of marine erosion and beach rehabilitation, the control of waste disposal in coastal areas or protection of habitats of special interest, such as that of the loggerhead turtle (*Caretta caretta*) or the Mediterranean monk seal (*Monachus monachus*).

An alternative that is increasingly used to provide municipalities with a framework for planning, coordination and consensus is the elaboration and implementation of a local Agenda 21 for municipalities or coastal cities. In the case of the municipalities consulted, they had received governmental support in the form technical and economic assistance, training courses and information. However, the success of this alternative depends on the participation of all interested parties, the local community and their associative structures.

NGOs that received support and assistance from governments for the implementation of activities for the integrated management of coastal areas represent 42 per cent of the NGOs that answered the questionnaire. The most frequent support received was technical and economic assistance, 35.5 per cent in each case. Information represents 21.4 per cent of the governmental support received by the NGOs and training courses 7 per cent. Governments encourage the use of assessment tools by providing information, subsidies, grants, technical assistance or training. The most frequent form of encouragement received by NGOs is in the form of information, technical assistance and training that together represent 86 per cent of all types of encouragement.

The main tools used in current national programmes for coastal management in the Mediterranean basin are traditional physical plans, coercive or mandatory measures (e.g.

the regulation of construction in coastal areas), establishment of construction limits and the use of an environmental impact assessment (EIA) for projects to be implemented in coastal areas. These tools are combined with traditional economic tools of fees, surcharges, fines or subsidies as well conventional instruments for economic appraisal and assessment of projects, such as cost-benefit analysis. In some cases, municipalities have been encouraged by the central government to apply these tools through the provision of information, technical assistance and fiscal incentives.

The Secretariat considers that assistance to member states in the development of tools and techniques for the integrated management of coastal areas is of utmost importance. As a result, the applicability and practise of an environmental impact assessment (EIA) or a strategic environmental assessment (SEA) have been presented and discussed at workshops. After a recent discussion of the status and use of a strategic environmental assessment (SEA) in the Mediterranean, a document on practical guidelines for its application was prepared by the Secretariat. The Secretariat is planning to develop and distribute additional tools for integrated coastal management for the assessment of tourist carrying-capacity and rapid coastal assessment. In addition, it is considering improving coastal information systems and land and sea use planning systems. Assistance to Contracting Parties for the improvement of legal frameworks and for preparation of national strategies on integrated coastal management will continue. The Priority Actions Programme (PAP) and the Blue Plan have submitted projects on management of coastal areas to the European Union in the framework of the Short and Medium-term Priority Environment Action Programme (SMAP). A special activity of the Secretariat has been the promotion through workshops and seminars of the Guidelines for Integrated Coastal Area and River Basin Management, which were tested on a specific project (the Cetina River Project).

In addition to the already-mentioned assistance (support for pilot projects, guidelines, training activities, legislative guidelines, etc.), the Secretariat has assisted the Contracting Parties in issues related to integrated coastal management. The ICARM became a major Priority Actions Programme/Regional Activities Centre activity and is now the leading centre for the promotion of integrated coastal management in the Mediterranean. A number of strategic guidelines and an annotated good practices guideline for ICARM have been prepared. These guidelines will soon be published and distributed, and regional and national training will be organized. In addition, a white paper on coastal area management in the Mediterranean has been prepared in an attempt to raise awareness on the need for sustainable management of coastal areas in the Mediterranean basin.

The Priority Actions Programme/Regional Activities Centre coordinated the role of coastal area management programmes (CAMPs), including four implemented projects and coastal area management programmes in seven large Mediterranean coastal urban agglomerations. This has contributed to improving the implementation of coastal area management programmes through the streamlining of activities, stricter management, improved links between needs and results and the shortening of project implementation. These activities have been complemented by a number of seminars and meetings. The Secretariat has assisted the Contracting Parties by encouraging an exchange of experiences and know-how and by ensuring access to information.

#### 3. Implemented activities

The main institutions involved in implementation of the recommendations have been governments, local authorities and the MCSD Secretariat. The MCSD Secretariat and the Priority Actions Programme/Regional Activities Centre have played a prominent role in implementation of the recommendations through its role as coordinator by providing assistance and by organizing training activities and the publication of information. NGO participation in implementation has been facilitated by government support.

#### 4. Constraints

The integrated and sustainable management of coastal areas encounters several obstacles, of which slightly more than one fifth were reported to be institutional and one quarter legal. In most cases, there is no specific legislation for the management of coastal areas. Most legislation or regulations cover spatial and sectoral policies on urban development, sea front conservation, development of infrastructure for tourism, regulation of public access to beaches or protection of nature and environmentally sensitive areas. In some cases, specific legislation has been enacted for coastal areas, or specific agencies have been created. This use of legislation is often oriented toward the correction of specific problems. For example, there are laws, institutions or regulatory mechanisms for the development of infrastructure in coastal areas, the protection of a particular landscape or a fragile or threatened ecosystem, control of land speculation, the conservation of specific habitats of typical or unique species, such as the loggerhead turtle and the Mediterranean monk seal, or for the control of the dumping of solid and liquid waste into the sea.

Although there is neither specific legislation nor an institution for the integrated management of coastal areas, a broad assortment of laws, institutions and regulatory mechanisms are currently used to perform specific tasks for the management of coastal In other cases, even though legislation or institutional mechanisms for the integrated and sustainable management of coastal areas exist, there are evident problems. One of the basic problems is that the concept of integrated management and sustainability is poorly understood. There is often an absence of coordination among the institutions involved, namely ministries, local authorities, municipalities, specific agencies and public utilities. A frequent overlapping of laws, regulations and responsibilities is often the origin of potential conflicts and mismanagement. In many cases, responsibilities are fragmented, and a wide spectrum of actors are involved: from governmental agencies to local authorities, from large industrial firms to tourist activities, from associations and conservation organizations to local individuals. There is sometimes a need to create new specific coordination mechanisms. To achieve a smoothly operating mechanism is a formidable task that may require significant changes to existing regulations and legislation affecting institutions and conflicting social, economic and political interests.

An additional problem is the scarcity of economic resources, which is reported as representing 15 per cent of the difficulties encountered in promoting the integrated and sustainable management of coastal areas. There is also a general lack of qualified personnel in many fields needed for the integrated and sustainable management of coastal areas. The lack of competent technical personnel represents 12.5 per cent of the difficulties reported by governments in relation to the integrated management of coastal areas. This lack of training is one of the priorities of the MCSD Secretariat. It is also reported that 12.5 per cent of the obstacles hindering wise coastal management are

political issues, while lack of awareness represents one out of ten of the obstacles encountered.

Another problem encountered in implementation of integrated and sustainable management of coastal areas is poor cooperation in the private sector and an insufficient capability of local public agencies and associations. However, despite the all these obstacles, governments are increasingly aware and committed to the integrated and sustainable management of coastal areas. This awareness is increasingly reflected in the actions planned or already implemented.

#### C. Tourism and sustainable development

The Contracting Parties adopted the MCSD recommendations and proposals for action on tourism and sustainable development at their eleventh meeting (October 1999). The proposals include 27 specific proposals for action in three main areas: management of the impact of tourism on the environment, promotion of tourism in harmony with sustainable development and development of Mediterranean cooperation.

#### 1. Implementation

The MCSD proposals most fully implemented are those on the promotion of tourism in harmony with sustainable development, although promotion is more emphasized than harmonization. Measures are oriented to reducing the seasonal nature of tourism by attempting to spread the tourist season over a larger part of the year.

A second priority is to improve the quality of destinations and mitigate their affects on the environment, thus increasing tourist satisfaction and adjusting tourist products to trends. This implies, however, subordination of other objectives to those of tourism. There have been attempts to identify outstanding coastal sites and to develop appropriate tools for their protection as biosphere reserves or nature areas. The resources for promoting the development of cultural, ecological and rural tourism are, however, scarce. Furthermore, resources for implementation of specific action programmes for the sustainable development of fragile areas, particularly islands and wetlands, are also very scare.

The proposal for diversification and improvement of tourist destinations is frequently interpreted in rather narrow terms, resulting in measures for improving tourist information offices, museums, tourism based on activities such as golf or sailing and events as tourist destinations. Under this approach, the environmental and the sustainable dimensions of tourism are often ignored. Some countries attempt to steer demand to centres that are often environmentally insensitive. In these cases, tourism is considered to be a catalyst for urban renewal and the involvement of local communities. Under this approach, conservation of scenic landscapes, coasts and parks seeks to promote the well-being of local inhabitants, relegating the satisfaction of tourist demand to a secondary consideration. Under this approach, large-scale and purely recreational tourism is discouraged. The concept of carrying capacity is not applied in almost half of the countries consulted. The need to control urbanization and the building of infrastructure too close to coastlines is a matter of increasingly concern, but is scarcely reflected in concrete action. Similarly, efforts to develop synergies between coastal and inland tourism and between tourism and other economic activities are infrequently pursued. Rehabilitation of mature destination sites has been undertaken by more than half of the countries consulted.

#### 2. Ways and means of implementation

Measures to harmonize tourism with sustainable development are usually oriented to improving the infrastructure at tourist destinations, facilitating access, creating infrastructure such as parking lots, roads and highways, information signs, refurbishing façades and old neighbourhoods, creating green areas and improving beaches in order to reduce the negative impact of urbanization and tourism on coasts. Reduction of the negative impact of tourism implies a corrective approach rather than prevention and is the focus of proposals to control expansion of urbanization for tourism.

Pilot studies reveal that most of the indicators of sustainable development refer to the economic implications of tourism. There are no indicators based on maximum carrying-capacity for tourist activities. As a matter of fact, conventional regional planning is most frequently viewed as a practical and operational tool to mitigate the impact of tourism. Current management practises are oriented to respond to the expansion of tourism, to use environmental impact assessments, to attempt to internalise the cost of waste disposal and maintenance of a supply of water, and the protection of historical and natural sites of outstanding value.

The environmental and ecological dimensions of the concept of carrying-capacity are often ignored. Too often, this concept is limited to the notion of the capacity of tourism accommodations, for example the number of beds available. The concept of carrying-capacity has only recently gained a place in tourism although it has been used for some time as a criterion to asses the sustainability of tourism. Scarce economic resources, institutional obstacles and the opposition of vested interests in the tourist sector are additional obstacles, representing 11.5 per cent, 7.7 per cent and 3.8 per cent respectively of the difficulties encountered in the use of carrying-capacity as an evaluation tool.

The legislative instruments most frequently used are not specifically oriented to promoting the sustainability of tourist activities, which tend to be regulated by national or local legislation, regulations or physical tools in force for specific tourist areas. Nonetheless, consideration of the impact and needs of tourism Is frequently included in coastal laws and national or regional plans for coastal development. In some cases, there are specific plans for developing tourism, but frequently these do not coincide with the sustainable development of tourism and overlap coastal rehabilitation and other sectoral plans. Regulations often prohibit construction within a previously determined distance from the coastline or require facilitation of access to coasts and beaches in cases where coasts are public property. Regulation of urbanization is sometimes included in planning for infrastructure, for example promoting roads perpendicular to the coastline instead of parallel to it.

As for techniques and instruments to evaluate the environmental impact of tourism, environmental impact assessments (EIA) are normally required for new projects. Three quarters of the countries consulted regularly use this instrument. Few NGOs have developed techniques to evaluate the impact of tourism, mainly because of a lack of technical means and professional expertise or simply because it is too costly.

Although the replies to the questionnaire indicate that the concept of carrying-capacity for evaluation of tourism activities is used in slightly less than half of the countries, the concept seems to be interpreted very loosely. It is used most when a tourist area

coincides with a protected area, a national park or a nature reserve. However, even in these cases the concept is often used in a rather narrow and controversial way. For example, in some cases carrying-capacity is measured in relation to the number of daily visitors in relation to paths and rest areas only. Without a previously established clear relationship between paths, rest areas and the ecological carrying-capacity of a protected area, the result may be misleading. In other cases, carrying-capacity is determined by the relationship between the number of daily visitors and the area of the protected area without taking into consideration the ecological peculiarities of that ecosystem, its biodiversity, fragility or any pressure from other sources (e.g. pollution in the surrounding area). In other cases, carrying-capacity is determined by the relationship between the level and diversity of tourist services, the water supply and its quality or even by the number of available rooms and beds.

The Secretariat and the Priority Actions Programme/Regional Activities Centre have produced and tested the Guidelines for Carrying-Capacity Assessment for Tourism in Mediterranean Coastal Areas. This method is easily adapted to local conditions and offers a realistic framework for planning sustainable tourism in defined areas. Furthermore, the results of an assessment of carrying capacity constitute an important input for the preparation of programmes and plans for the integrated management of coastal areas. However, the concept of carrying capacity is not used in slightly less than half of the countries consulted. The main reasons for this is a lack of methodology and technical expertise, slightly more than one out or five of the total reasons in each case. A lack of accurate data is the third obstacle and represents one fifth of all causes impeding the use of carrying-capacity to evaluate tourist activities. Information provided by the municipalities that replied to the questionnaire confirms that efforts to promote this approach are not widespread because of a lack of a clear methodology and financial resources. Nonetheless, several municipalities reported having the means to evaluate the impact of tourism and for large-scale projects in the form of expertise and methodologies based on the use of indicators. In 1997, one municipality carried out an evaluation of the carrying-capacity of tourist destination sites and implemented measures to ensure that accommodations offered are limited to a defined carrying-capacity.

NGOs consider that the concept of carrying-capacity is poorly defined, its methodology is unclear, there is inadequate information available and that technical expertise is lacking. The last two shortcomings account for six out of ten problems associated with the use of carrying-capacity and inadequate definition for 21 per cent. In spite of this, 42 per cent of the NGOs have carried out an evaluation of the carrying-capacity of tourist destination sites, although the results of these assessments have been implemented in only one case.

Only two of the countries consulted reported having adopted environmental management practices for the tourist sector, while about one out of three recognize that this type of management is only partially practised in that country. One municipality has implemented environmental management practices at tourist destination sites through the introduction of clean, energy-and-water-saving technologies and the adoption of voluntary certification schemes. The same municipality participated in international initiatives and networks for sustainable tourism, such as the Tour Operators Sustainable Initiative, ECoNETT, Green Globe 21 and ICLEI.

Mechanisms to enable the tourist sector to participate in financing the protection of natural and cultural sites have been implemented in slightly more one third of the countries, but in some countries appropriate mechanisms are considered to be scarce or inadequate. Although there is an evident growing sensitivity to the notion of sustainability, translation of this sensitivity into concrete action is inadequate and encounters several obstacles. This is reflected in recommendations and proposals to reconcile tourism, the environment and sustainable development in relation to the promotion of tourism and balanced regional development. Very little has been done to define and share responsibilities despite the fact that negotiations to deal with tourist activities have been undertaken by governments and local authorities in two thirds of the Mediterranean countries that answered the questionnaire.

As for Mediterranean cooperation, half of the countries participate in Mediterranean programmes, but little has been done to promote the sharing of experiences, implementation of Mediterranean networks of professionals and promotion of regional cooperation mechanisms. The MAP Secretariat has assisted countries on this issue through the production and distribution of documents and by providing methodological tools for the assessment of the environmental impact of tourism.

#### 3. Implemented activities

The local authorities, the government and the MAP Secretariat have played an important role in implementation of this recommendation. The tourist sector has, however, played only a marginal role in implementation of this recommendation. NGO participation in implementation of the recommendation on tourism and sustainable development is relatively modest because of technical and financial considerations.

#### 4. Constraints

Case studies reveal that major institutions are unaware of the MCSD recommendations and activities and that many actions adopted to promote environmentally sound and sustainable tourism do not necessarily take into account the MCSD recommendations and proposals. Moreover, many ongoing activities and programmes related to tourism had been initiated before the adoption of the MCSD recommendations and proposals.

A frequent obstacle to the management of sustainable tourism is the vested interest of institutions that promote tourism at all costs in order to maximize immediate economic gain. Those interest are in direct conflict with interests attempting to ensure the sustainability of tourism. One of the pilot studies indicated that an important prerequisite for success is sustainable growth. Information provided by the municipalities that replied to the questionnaire reveals that efforts to promote this approach suffer from unclear methodology and a lack of financial resources.

The concept of carrying-capacity is not used in slightly less than half of the countries consulted. The main reasons for this is a lack of a methodology and technical expertise, 23 per cent in each case. A lack of data is the third most frequent obstacle and represents 19.2 per cent of all causes impeding the use of the carrying-capacity approach to evaluate tourist activities. Scarce economic resources, institutional obstacles and opposition within the tourist sector are other obstacles representing 11.5 per cent; 7.7 per cent and 3.8 per cent respectively of the difficulties encountered in the use of carrying-capacity for evaluation of sustainability. Information provided by the municipalities that replied to the questionnaire reveals that efforts to promote this approach lack a clear methodology and financial resources. The difficulties encountered in practicing

environmental management are mainly the high cost of implementation, a lack of appropriate methodology for managing environmental systems and a lack of expertise. These difficulties represent 29.4 per cent, 29.4 per cent, and 23.5 per cent respectively of the mentioned difficulties.

The main obstacle preventing countries from using an environmental impact assessment is a lack of technical expertise. This obstacle represents 36 per cent of the obstacles mentioned, while economic constraints were stated to be the main obstacle in 24 per cent of the replies. Other impediments were a lack of regulations or a lack of a methodology.

#### D. Information, public awareness, environmental education and participation

Most, 15 out of 18, of the countries that replied to the Secretariat's questionnaire have a strategy or programme on information, public awareness, environment education and participation. NGOs are involved in two thirds of these strategies or programmes. Future NGO participation was not envisaged in four countries. Pilot participatory and mobilization projects had been implemented in two thirds of the countries that responded to the questionnaire. Exhibition or state-of-the-art events had been organized in slightly more than half of the responding countries.

Concerning environment education, 44.7 per cent of the replies revealed participation in Mediterranean networks of educators, but only 22 per cent had undertaken an assessment of the resources needed for training half of all primary school teachers. The municipalities that replied to the questionnaire participated actively in campaigns and government programmes for promoting awareness. One country was involved in a project to extend the notion of local Agenda 21s to the island where this municipality is located.

The Secretariat frequently assisted the Contracting Parties to implement this set of recommendations. The Secretariat participated in the regional workshop for Mediterranean Arabic-speaking countries on information awareness and participation in the field of the environment and sustainable development. The workshop benefited from the participation of regional institutions and NGOs and produced a strategy that was being adapted and extended to all the Mediterranean region. Together with an NGO, the Secretariat produced a manual on the participatory approach and assisted countries in preparing and disseminating national brochures on the environment and sustainable development in national languages and in English and French.

The Secretariat is planning to involve major Mediterranean NGO networks in the preparation of feasibility studies on ways and means of implementing the MCSD recommendations. Furthermore, the Secretariat backed the publication of success stories on the environment and development in the Mediterranean.

#### E. Indicators of sustainable development

The MCSD recommendations and proposals for action on the theme of indicators of sustainable development invite the Contracting Parties to establish a voluntary system of indicators of sustainable development for use in Mediterranean countries. Five of the recommendations are addressed to the Contracting Parties and two to the MAP Secretariat. Those concerning the Contracting Parties refer to adoption of a common set of indicators, testing status and response indicators, contributing to a report on indicators

and submission of national reports on this subject. The contracting Parties were also asked to build up a capacity to promote, harmonize and coordinate work on producing, monitoring and enhancing indicators. The proposals concerning the Secretariat referred to harmonization and dissemination of indicators to facilitate work at the national level and to follow up work on indicators through the regional activity centres.

#### 1. Implementation

A common set of indicators had been prepared by 44.4 per cent of the countries while 28 per cent were in the process of doing so. A similar percentage had not yet implemented this recommendation. A preliminary set of indicators has, however, been prepared in 63.3 per cent of the countries. Of the countries that developed a preliminary set of indicators, three out of four countries had based their indicators on pressure, status and response. The other countries had prepared status indicators, and one country had prepared pressure and status indicators. The system of indicators adopted in various countries reflected differences in the importance of various problems in different countries. Countries that were relatively well endowed with water resources had not prepared indicators of water scarcity. Similarly, countries not affected by soil erosion and desertification did not attach importance to indicators for assessing and monitoring these problems.

The most frequently proposed indicators concerned urbanization, water and air pollution, industrial waste, marine pollution and tourism. Indicators related to biological diversity (e.g. biodiversity, introduction of exotic species or genetically modified organisms) were the least common. Only two countries that answered the questionnaires did not carry out some type of capacity-building. Capacity-building covers a wide range of activities, including development of a system of environmental statistics, development of indicators of sustainable development, new forms of monitoring, data collection and training of personnel. Some activities were undertaken within the framework of regional efforts such as MEDSTAT or Euromed.

Only 39 per cent of the countries that replied to the questionnaire had supplied MAP with national reports prepared for the United Nations Conference on Sustainable Development (UNCSD).

The Secretariat, specifically the Blue Plan, had proposed a methodological framework for the use of indicators of sustainable development compatible with other international initiatives on this matter, such as those of the European Environmental Agency, the Organization for Economic Cooperation and Development (OECD) and the United Nations Conference on Sustainable Development (UNCSD). The Secretariat had established a common set of 130 indicators of sustainable development tailored to the specific conditions of the Mediterranean region. Following adoption of this set of indicators by MCSD and the Contracting Parties, a programme involving all Mediterranean countries had been initiated that included preparation of a detailed glossary, initial calculations using the first indicators, an exchange of information during a regional workshop and monitoring of the up-dating of the indicators. The main difficulties encountered by the Blue Plan were primarily methodological and conceptual.

The concept of sustainable development is very broad and covers too many issues of very different character. To cover such a broad area requires the involvement of a large number of experts. The difficulties created by the large number of issues are further

complicated by the diversity of situations and priorities in the Mediterranean countries making it difficult to achieve agreement. This was a particularly relevant obstacle in the pursuit of homogeneity of definitions and methods. The broad and diverse character of the issues to be dealt with introduced an institutional hindrance because it was necessary to cooperate and involve many different institutions in each country. The solution was to work in networks and exploit synergies with other Mediterranean programmes (e.g. Metap, IPE, MEDSTAT).

#### 2. Ways and means of implementation

The approach adopted for implementation of the recommendations had been a series of meetings, workshops and training activities at the national and regional levels. Communications between the MAP Secretariat and the Contracting Parties has been fundamental for implementation of these recommendations.

#### 3. Implemented activities

The main institution for implementation of the recommendations had been the Secretariat through the methodological framework proposed by the Blue Plan. The Secretariat participated in the selection of 130 indicators and coordinated the participation of the countries of the Mediterranean basin. Governments, through their bureau of statistics or ministry for the environment, have been the main participants at the national level in the countries that adopted the common or partial set of indicators.

#### 4. Constraints

The main difficulties encountered by the Contracting Parties in the establishment of a system of indicators of sustainable development was a lack of a conceptual or methodological approach and an inadequacy of the data-gathering that together made up 41 per cent of the difficulties (20.5 per cent each). A lack of resources, institutional barriers and inflexibility each represented 13.6 per cent of the difficulties, and a lack of technical expertise accounts for 11.4 per cent of the difficulties. Lack of adequate data and awareness represented 11 per cent and 9 per cent respectively.

The main difficulty in establishing a methodology was that sustainable development is a concept embracing many dimensions in many different areas of activity, some of them very complex. This diversity of dimensions produces an amount of data and information that must be processed at considerable operational costs.

## II. SHORTCOMINGS AND ADVANTAGES OF THE RECOMMENDATIONS AND PROPOSALS

The main shortcomings encountered by governments in implementation of the MCSD recommendations and proposals were poor dissemination of the recommendations, a lack of defined follow-up and poor communication between the MAP Secretariat, the Contracting Parties and other partners. Slightly less than half the replies reported poor dissemination of the recommendations to be a serious or very serious obstacle, yet a similar percentage did not see this as a serious problem. For NGOs, poor dissemination of the recommendations was a serious shortcoming in two thirds of the replies and very serious in 17 per cent.

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A lack of defined follow-up was one of the most frequently mentioned obstacles, together with the poor dissemination of recommendations. About four out of five of governments that mentioned this obstacle considered it to be a serious or very serious obstacle (slightly more than one half of the cases). NGOs rated the seriousness of this failure slightly higher, 57 per cent. Other problems guite frequently mentioned were that the recommendations ignore the diversity of the Mediterranean countries, the technical capabilities of countries, the need for large amounts of data and information for implementation, the level of economic resources required for implementation and simply that the recommendations and proposals were unrealistic. These five problems accounted for a large part of the obstacles reported, although with different degrees of The absence of a taking into account of the diversity of Mediterranean countries was considered by governments to be a serious or very serious inconvenience in slightly more than one third of the cases. For NGOs, this shortcoming did not have the same relevance, not only because it was mentioned on fewer occasions but also because it was considered to be less serious.

Among governments, 85.6 per cent think that to overlook the unavailability of data was an important shortcoming, and 57 per cent found this a serious or very serious shortcoming. A similar view was expressed by NGOs that consider this failure an important and serious one in 84 per cent of the responses. The lack of an awareness of the inability to muster the required financial resources was considered by governments as a serious or very serious shortcoming of the recommendations in 43 per cent of the cases, while in 7 per cent of the cases this shortcoming was considered to be minor. NGOs considered this to be a serious or very serious shortcoming in 86 per cent of the cases.

Governments believed that a lack of due consideration of the limited technical capabilities of countries was one of the most frequently obstacles for implementation of the recommendations. Fourteen per cent saw it as a serious shortcoming and 21 per cent as a very serious one, while 43 per cent considered it to be an important defect of the recommendations. NGOs saw it as important in one third of the replies.

An unclear formulation of the objective of the recommendations was considered by governments as an important though not serious shortcoming of the recommendations in slightly more than half the cases that mentioned this aspect. This was the shortcoming least-mentioned by NGOs and was considered mainly as an unimportant failure of the recommendations. The lack of clarity concerning the expected outcomes and lack of defined follow-up were among the most frequently mentioned obstacles for implementation of the recommendations. The lack of clarity of the expected outcome was considered by governments to be an important defect in 43 per cent of the answers and a serious or very serious implementation of the recommendations was among the most frequently mentioned obstacles. In 43 per cent of their answers, governments considered this aspect to be a serious oversight, compared with 57 per cent of the NGOs opinions.

The absence of guidelines or inadequate indications on how to implement the recommendations were the most frequently mentioned obstacles reported by governments: 63 per cent of the cases indicate that this was an important and serious failure of the recommendation, although only 14 per cent of the respondents qualified it as very serious. For NGOs, the percentages were higher: 86 per cent and 14 per cent respectively. The omission of considerations on the institutional aspects of the implementation of the recommendations was mentioned in two thirds of the replies of governments, and in 58.3 per cent of the replies it was considered an important and

serious shortcoming of the recommendations and in 17 per cent as a very serious one. For 62 per cent of the NGOs, it was a serous and even very serious shortcoming. It is interesting to note that the type of obstacles most frequently mentioned represent no more than one third of the replies and that when there was a convergence or tacit consensus it was always in shortcomings considered serious or very serious. It is also worth noting that two countries did not answer this part of the questionnaire and that one country considered almost all the obstacles to be unimportant. The main obstacle faced by the Secretariat in implementing the MCSD recommendations was a scarcity of human resources.

In general, the municipalities that replied to the questionnaire believed that the difficulties encountered in implementing the MCSD recommendations and proposals originated in the fact that they ignored the diversity of Mediterranean countries, lacked a clear objective, were confused, failed to address how to implement them and were poorly disseminated. Of lesser importance was the fact that they ignored the data necessary for implementation, failed to take into account the need for economic resources for their implementation and were unrealistic. A third category of difficulties was the scarce consideration of institutional aspects, the poor system of communication between partners and confusing ideas in relation to expected outcomes.

It is difficult to estimate the value added by implementation of the recommendations and proposals in relation to each theme for several reasons. Practically all themes covered by the recommendations and proposals are activities that were initiated before the creation of MCSD and not in response to its recommendations. It is extremely difficult to separate the result of previous activities from what could be a contribution resulting from implementation of the recommendations. Moreover, it is plausible that what appears to be a response to an MCSD recommendation is but the logical evolution of a previously initiated activity. It should be kept in mind that the likelihood of implementation of a given MCSD recommendation is made possible because of activities carried out earlier, creating structures and conditions (institutional, administrative, legal or human) for implementation of MCSD recommendations later (e.g. the case of the management of water demand). In addition, it seems that this situation was not foreseen by MCSD, so there are no criteria, no systems and no methodology for this type of evaluation. The MCSD proposals were prepared and approved rather recently. As a result, very little information is available on their implementation. Nonetheless, there are some concrete facts that reflect their positive contribution to sustainable development. Some of them are general, while others are inherent to implementation of specific recommendations or to implementation of a component. The effective involvement of the civil society is certainly an added value. Another is the evident increase in the generation and flow of information among the Mediterranean countries.

The process of design, adoption and implementation has had an important educational effect on decision makers, planners, politicians, managers, local authorities, members of civil society, the private sector and the media. The same process has had important positive political effects. One underlying principle of implementation of the recommendations is promotion of the participation of more parties. This involvement has apparently been most successful in some cases than in others, but it is important that a process of increasingly effective participation has been triggered. The process of implementation contributes to raise the visibility of the problems inherent to the ecological, economic, social and political dimensions of sustainable development.

#### **SECTION 3: PROPOSED GUIDELINES**

#### I. DESIGNING GUIDELINES

#### A. Justification and objectives

The main purpose of the guidelines is to mobilize and focus efforts to achieve agreed objectives. In the context of this broad objective, the guidelines are expected to:

- (a) Provide a forum and perspective for debate on implementation and follow-up of MCSD recommendations and proposals;
- (b) Provide a framework for focusing on a common set of priority issues;
- (c) Provide support for planning and carrying out measures and actions to enhance knowledge and to strengthen institutions with respect to priority issues;
- (d) Develop institutional capacities;
- (e) Provide a normative frame against which to assess achievements;
- (f) Contribute to the improvement, preparation, adoption and implementation of additional clear and practical proposals.

The key issues have already been defined by MCSD: (a) management of water demand, (b) integrated and sustainable management of coastal areas, (c) tourism and sustainable development, (d) information, public awareness, environmental education and participation, (e) indicators of sustainable development, (f) free-trade and the environment in the Euro-Mediterranean context, (g) industry and sustainable development, and (h) sustainable management of urban development. Other issues could be considered by MCSD in the next few years concerning agriculture, rural development, urban waste management, consumption patterns, international cooperation, mobilization of resources and partnerships.

#### B. Identification and evaluation of capabilities and options

- Legal, economic and environmental instruments
- Institutional development
- Technological options
- Capacity-building

#### C. Anticipating potential obstacles and conflicts

- Lack of agreement on the severity or the existence of a problem, how to approach and solve it and responsibility for that task
- Lack of technical capability and financial and managerial resources
- Political opposition

#### D. Identification, promotion and support of actions leading to successful implementation

Each action should be defined in terms of purpose, inputs and outputs, roles and responsibilities of the implementing body, budgetary and financial implications and monitoring and evaluation processes.

- Institutional development including coordination mechanisms
- Capacity-building

- Improved decision-making through better information and analytical techniques
- Identification of practices for the rational use of new resources and improvement of the use of existing resources
- Development of methodological tools for assessment and evaluation
- Ad-hoc programmes, pilot projects and case studies
- Training programmes
- Dissemination of information and networking
- Development of legislative and regulatory mechanisms
- Development of decision-making instruments, such as environmental assessment, cost-benefit analysis, environmental impact assessment (EIA), technological assessment, risk analysis and carrying-capacity assessment
- Economic measures, subsidies, taxes and incentives
- Transfer of technology and know-how
- International cooperation
- Dissemination of information and effective communication
- Public awareness campaigns

#### E. Defining priorities for action

- Setting criteria for defining priorities (cost-benefit, cost-efficiency, cost-effectiveness)
- Social, economic, environmental and political priorities
- Identifying and carrying out trade-offs

#### F. Definition of a time frame and deadlines

A strategy must allow for two time frames: a functional time frame within which each strategic activity is implemented and monitored and meets its objectives, and a long-term time frame of completion of the overall goals as a result of synergetic interaction of all strategic activities. The use of two time frames makes it possible to use indicators for assessing performance in each phase of implementation. The functional time frame covers the period required for a strategic activity to produce desired results. This is the period during which a starting point is selected for each activity, the time lag between initiation and full-scale development of an activity and the time for implementation of each task.

#### G. Definition of follow-up for each key issue

Strategic activities are not isolated actions. Each strategic activity produces changes during its implementation and affects other activities. A strategy must take into account the effects of new situations in order to ensure that all positive effects are long lasting. Any strategic activity must also take into account the activities required to continue the dynamic process triggered by the original strategic activity. Allowance must be made for new financial, technical and human resources, as well as resulting needs for changes in institutions and regulations. There will be social, economic and environmental impacts of the strategic activity, and monitoring and corrective planning should be provided for.

#### H. Design of the information and communication component

Information and communications are essential components of any strategy and are essential for visibility and for achieving effective cooperation at all levels. An effective

information and communications system conveys MCSD's intentions and helps to insure coherence across activities and the use of resources. Provision of information about a strategy itself is the first step towards coordination with partners on the task, the ends and general objectives, policy objectives and implementation. A dynamic information and communications strategy is essential for implementation and follow-up. A strategy should identify target groups, means and tools for use in an information and communication component and establish the necessary infrastructure and institutional mechanisms. Among target groups are actors responsible for implementation of recommendations and proposals, the media, decision makers, donors, influential groups, NGOs and local authorities. Tools include newsletters, educational publications, audiovisual presentations, field trips, public debates, workshops, public hearings and forums. Actors also include the MCSD Secretariat, the MAP regional activity centres and the Contracting Parties.

#### I. Planning for action

- Determining resources needed for implementation of key actions
- Budgeting and financing
- Allocation of financial, technical and human resources to key issues and corresponding actions
- Defining an organizational structure and coordination mechanisms

#### J. Monitoring and evaluation

- Determination of types of indicators
- Indicators of status, pressure (processes) and responses
- Indicators of input, output and performance
- Normative and descriptive indicators
- Reporting on implementation
- Review, revision and adaptation process

#### II. THEMATIC SUB-GUIDELINES

## A. <u>Sub-guidelines for implementation of recommendations on management of water</u> demand

Management of water demand is a priority for MCSD. This objective seeks to reduce water demand or decrease any increase in demand, harmonize demand and supply, coordinate and maximize multiple use of water, factors governing water requirements and adaptation of water use structure. An analysis of the questionnaires and study cases reveals that current efforts have been oriented to controlling water demand using direct technical and economic measures in combination with indirect measures to facilitate application of measures affecting the user behaviour. Implementation of the MCSD recommendations have focused on reducing demand and influencing behaviour. However, policies and measures have been only partially adopted and little has been done to monitor and evaluate their effectiveness.

The objectives of the sub-strategy are:

continued and strengthened actions oriented to affecting user behaviour

- establishment of mechanisms and measures for harmonization of supply and demand, for coordination of sectoral users and for monitoring and evaluating the effectiveness of policies and measures
- increased efforts to maximize multiple use of water resources
- continued and strengthened actions for decreasing water demand
- strengthened national capabilities for managing water demand

Additional work is needed to identify and solve shortcomings and conflicting situations, including adoption of new laws and regulations to complement those already adopted. Because the effectiveness of laws and regulations depend on effective enforcement, enforcement mechanisms should be created and strengthened.

The economic dimensions of this sub-strategy are the identification of existing and new sources of financing for activities promoting better management of water demand; evaluation of the expected economic results of policies and measures; and evaluation of the cost-efficiency and cost-effectiveness of measures and policies. Environmental dimensions are assessment of water demand of natural systems and implementation of mechanisms to ensure the maintenance of minimum levels of supply for the conservation and functioning of natural ecosystems. Social dimensions are to create institutional mechanisms for equal access to water resources for everyone and improvement of drinking-water quality.

Technological options are exploration of alternative technological options best suited to each country's specific conditions, promotion of mechanisms to ease technology transfer and increased exchange of experience and know-how with other countries, the carrying out of research on water demand and implementation of cost-effective methodologies for assessment of technological alternatives.

#### Capacity-building and training for:

- Choice, assessment and management of technical options for affecting water demand
- Monitoring and evaluation of measures, policies and projects aimed at influencing water demand
- Information diffusion and awareness creation
- Anticipation of potential obstacles and conflicts
- Institutional constraints such as conflicting competence between institutions and lack of institutional mechanisms
- Economic obstacles: scarcity of financial resources, high operational costs
- Environmental, social and political obstacles
- Lack of technological capabilities
- Poor awareness of stakeholders

#### 1. Identification of actions for successful implementation

- Completion of the incorporation of water demand management approach in national water policies
- Incorporation of water demand management practices in sectoral development policies and activities, particularly in agriculture
- Incorporation of water demand practices in urban water management

- Strengthening and enhancement of awareness programmes on water use, misuse and waste
- Continuation of efforts to improve the efficiency of water distribution systems, particularly for irrigation and drinking water
- Assessment of the economic and technical aspects of existing price systems and charges
- Implementation of price systems and charges suitable to specific situations
- Promotion of the transfer of technology and know-how on water management
- Encouragement of international and regional cooperation on water management

#### 2. Determining priorities for action

- Costs and benefits
- Cost efficiency
- Added value
- Social benefits
- Environmental criteria

#### 3. Definition of a time frame and deadlines

- Time required for a strategic activity to produce results
- Selection of a starting point for each activity
- Time for implementation of tasks and strategic activity

#### 4. Design of follow-up

- Continuation of activities
- Economic, technical and human resources
- Institutional and regulatory requirements
- Evaluation of social, economic and environmental impacts
- Monitoring

#### 5. Identification of responsibilities

- Government and water commission
- Public services
- Basin authorities
- Regional authorities
- Local authorities
- User and professional associations
- Research and development institutions
- Educational institutions
- NGOs
- MCSD Secretariat

#### 6. Design of the information and communication component

A strategy should identify target groups, means and tools for use in an information and communication component and establish the necessary infrastructure and institutional mechanisms. Among target groups are actors responsible for implementation of recommendations and proposals, the media, decision makers, donors, influential groups,

NGOs and local authorities. Tools include newsletters, educational publications, audiovisual presentations, field trips, public debates, workshops, public hearings and forums.

#### 7. Planning for action

- Determining resources needed for implementation
- Organization for implementation

#### 8. Monitoring and evaluation

- Establishment of input, output and performance indicators
- Reporting on implementation
- Review and revision of targets and deadlines

## B. Sub-guidelines for implementation of recommendations on the integrated and sustainable management of coastal areas

#### 1. Key issues, elements and objectives

The economic, social and environmental degradation of many Mediterranean coastal areas and islands makes the integrated and sustainable management of coastal areas a high priority. The main goal of this sub-strategy is to reduce, stop and whenever possible revert degradation. This goal should be combined with valorisation of coastal areas for sustainable development. The key issues to be considered are:

- Characteristics of ecosystems
- Quality and quantity of coastal resources
- Spatial organization and use
- Loss of habitat
- Erosion in coastal areas
- Urbanization and tourism
- Pollution of the marine environment

The MCSD recommendations address institutional mechanisms, legislative and regulatory instruments, incentives, pilot projects, access to information and participation in the integrated management of coastal areas. The integrated management of coastal areas tends to be interpreted as an objective in itself, ignoring the extent to which its implementation contributes to the preservation of the environment and sustainable development. Implementation of the MCSD recommendations is only indirectly related to the ultimate goals of integrated coastal management. This shortcoming impedes an adequate assessment of the effective contribution of actions and of any resulting added value.

The objectives of this sub-strategy are:

- Integration of environmental protection and rehabilitation of coastal areas into national development strategies and policies
- Systemic and holistic management of coastal areas
- Protection of critical ecosystems

- Optimised and sustainable multiple use of coastal areas resources, space and potentialities
- Increased knowledge about the structure, functions and dynamics of coastal areas
- Strengthened regional and local capability for integrated and sustainable management
- Mechanisms for monitoring and evaluating the effectiveness of policies and measures

Legal and institutional aspects – Additional work is needed in order to create operational instruments such as land-use instruments, physical plans, Local Agenda 21s and specialized institutions; to solve conflicts between national, regional and local regulations; to establish mechanisms for multi-sectoral and multilevel coordination and to adopt additional laws and regulations; and to create enforcement mechanisms.

Economic dimensions – There are three basic economic dimensions that define capacities and options:

- Existing and new sources of financing
- Economic evaluation of the results of policies and measures
- Cost-efficiency and cost-effectiveness of measures and policies

Environmental dimensions – Assessment of potential resources, pressures and threats of coastal areas

Social dimensions – Participation of local inhabitants in the integrated management of coastal areas

Technical options – Exploration of new and alternative technical options available for the specific conditions of coastal areas. Promotion of mechanisms to transfer methodologies, practises and technology. Increased exchange of experience and know-how. Implementation of cost-effective methodologies for assessment of technical alternatives.

Capacity-building and training for:

- Choice, assessment and management of technical options
- Monitoring and evaluation of measures, policies and projects
- Physical planning
- Development of information systems
- Provision of information and promotion of awareness

Institutional and administrative constraints – Conflicting competence among institutions and lack of institutional machinery

Economic obstacles – Scarcity of financial resources, heavy investments

Environmental obstacles -

Social obstacles - Lack of awareness

Political obstacles -

#### 1. Identification of actions leading to successful implementation

- Definition of coastal areas
- Creation of legislative, regulatory and enforcement instruments and institutional machinery
- Creation and strengthening of administrative structures and frameworks for coordination of actions and actors
- Development and improvement of environmental infrastructure for urban areas in coastal environments
- Establishment of regulations for environmental impact assessment of coastal activities
- Incorporation of decision-making tools such as environmental assessment, costbenefit analysis, use of scenarios and risk analysis
- Ad-hoc programmes, demonstration and pilot projects
- Economic measures, subsidies, taxes incentives
- Encouragement of international and regional cooperation on integrated and sustainable management of coastal areas

#### 2. Determining priorities for action

- Assessment of the ecological fragility, sensitivity and relevance of coastal areas
- Assessment of pressures and threats
- Social and environmental costs and benefits
- Cost efficiency
- Added value

#### 3. Definition of a time frame and deadlines

- Time required for a strategic activity to produce previously established results
- Selection of a suitable starting point for each activity
- Time for setting up the activity
- Time for implementation of tasks within each strategic activity
- Identification of expected results and design of follow-up
- Required economic, technological and human resources
- New responsibilities and involvement of agents and actors
- Institutional and regulatory requirements
- Social, economic and environmental impacts
- Monitoring and corrective planning

#### 4. Identification of actors and responsibilities

- Regional and local government
- Local and regional associations
- NGOs
- MCSD Secretariat

#### 5. Design of the information and communication component

Target groups – The implementation actors, local authorities, industrial associations, chambers of commerce, the media, decision makers, donors, influential groups, NGOs, educational institutions and national and regional networks

#### 6. Planning for action

- Financing, including budgeting and identification of potential sources
- Tools: Newsletters, publications, audiovisual material, public debates, workshops, seminars, public hearings and forums
- Definition of organizational structures and coordination mechanisms
- Definition and creation of institutions for community participation

#### 7. Monitoring and evaluation

- Environmental and social indicators of status, pressures and response
- Indicators of input, output and performance
- Reporting on implementation
- Review and revision of priorities, targets and deadlines

## C. <u>Sub-strategy for implementation of the recommendations on tourism and sustainable</u> development

#### 1. Key issues, elements and objectives

Tourism in the Mediterranean basin plays a crucial economic role, providing large revenues for many municipalities, the private sector and governments. While tourism in the region will continue to grow at a rapid pace, the deleterious effects of tourism on the natural environment is a matter of increasing concern. On the one hand, tourism and its expansion are crucial for economic development, and, on the other, the negative effects of tourism are often harmful in the long run. The challenge and long-term overall goal are for Mediterranean countries to find a harmonious relationship between the development of tourism and long-term sustainability.

The basic issues to take into account are:

- Quality, quantity and use of natural resources
- Spatial organization and land use in a context of balanced regional development
- Diversification and promotion of tourism
- Urbanization and the pressures of tourism
- Pollution and waste disposal
- Pressure on natural resources (e.g. water)
- Environmental degradation

An analysis of the questionnaires answered by governments, NGOs, local authorities and the Secretariat reveals that the aspects of the MCSD recommendations and proposals that received most attention are those concerning promotion of tourism in harmony with sustainable development although promotion of tourism prevails over harmonization with sustainable development. The analysis also reveals poor understanding of basic concepts and methodologies and a lack of awareness of MCSD recommendations and proposals. The basic objective of the MCSD recommendations is to contribute to an overview and tangible proposals focused on the relationship between tourism, the environment and sustainable development.

#### 2. Identification and evaluation of capabilities and options

- Legal and regulatory instruments for the management of urban pressure and the protection of natural and historical sites. Creation of enforcement mechanisms
- Economic dimensions Four basic economic dimensions define capacities and options. The growing importance of tourism in terms of revenue, employment and infrastructure development. The economic evaluation of the expected results of the policies and measures. Cost-efficiency and cost-effectiveness of adopted measures and policies. Tourism as a potential source of financial resources for the protection of natural, historical and cultural sites
- Environmental dimensions The potentialities of tourist areas that are mature, of rapid growth or of great undeveloped potential. The assessment of tourist pressure and its threats to the environment and long-term sustainability
- Social dimensions Employment opportunities. Development of basic infrastructure. Participation of the local population and civil society in the planning and management of tourism
- Managerial options Adoption of environmentally sound management. Promotion
  of quality and environmental standards and certification. Increased exchange of
  experience and know-how with other Mediterranean tourist destinations
- Technological options To explore new and alternative technological options suited to the specific environmental, economic and social conditions of each tourist destination
- Capacity-building and training for sustainable management of tourism

#### 3. Identification of likely obstacles and conflicts

- Institutional and administrative constraints for managing tourism
- Economic obstacles and the mistrust of the tourist sector concerning environmental and sustainable development polices
- Environmental obstacles The impact of tourism on landscape, resources and environmental quality
- Social obstacles The fear of local inhabitants that environmental controls can deter tourism with negative effects on employment and income generation
- Lack of awareness

#### 4. Identification of actions for successful implementation

- Definition of tourist areas to be managed: mature destinations, new destinations of rapid expansion, potential new destinations
- Promotion and adoption of environmentally sound management practices in tourism. Design and implementation of instruments to evaluate tourism impacts
- Adoption of legislation and regulations concerning tourist urbanization
- Rehabilitation of deteriorated mature tourism destinations
- Involvement of the private sector in the management of sustainable tourism
- Promotion of quality environmental management of tourist infrastructure
- Regulation concerning waste disposal and pollution
- Creation and strengthening the administrative structures and frameworks for the coordination of actions and actors involved in tourism activities
- Development and improvement of environmental infrastructure for urban areas at tourist destinations

- Establishment of regulations for environmental impact assessment and carryingcapacity assessment of tourism activities
- Promotion of decision-making instruments or measures like: environmental assessment, cost-benefit analysis, scenario building, risk analysis etc.
- Ad-hoc programmes, projects demonstration and pilot projects
- Economic measures, subsidies, taxes incentives etc.
- Design of mechanism of negotiation, conflict solution between interested parties
- Involvement of local participation in the sustainable management of tourism activities
- Participation in regional networks

#### 5. Determining priorities for action

- Tourism pressure in terms of population density
- Assessment of the ecological fragility, sensitivity and relevance of the area where actions will be implemented. Carrying capacity assessment
- Assessment of the present and expected pressures and threats over the tourist destination
- Social and environmental costs and benefits
- Cost efficiency
- Value added

#### 6. Definition of a time frame and deadlines

- Time required for a strategic activity to produce desired results
- Selection of a suitable starting point for each activity
- Time between the starting point and the full-scale development of the activity
- Time for each task to be implemented within each strategic activity
- Definition of a starting point for each task and its end point

#### 7. Identification of expected results and design of follow-up

- Activities required to continue the dynamic process triggered by the original strategic activity
- The required economic, technological and human resources
- New responsibilities and the involvement of agents or actors in tourism, tour operators
- Institutional and regulatory requirements
- Social, economic and environmental impacts
- Monitoring and corrective planning

#### 8. Identification of actors and responsibilities

- Government
- Regional government
- Local authorities
- Tour operators
- Hotels, restaurants
- Local and regional associations
- NGOs
- MCSD Secretariat

#### 9. Design of the information and communication component

- Target groups Actors responsible for implementation, tour operators, hotels local authorities, the media; decision makers, donors, influential groups, NGOs, students
- Tools Newsletters, publications, audiovisual material, debates and hearings, workshops, forums
- Channels Media, associations, educational institutions, national and regional networks, NGOs

#### 10. Planning for action

- Determination of financing, including budgeting fund raising
- Definition of organizational structure and negotiation mechanisms

#### 11. Monitoring and evaluation

- Indicators Status, pressure and response; input, output and performance
- Reporting
- Review and revision

## <u>D. Sub-strategy for implementation of recommendations on information, public</u> awareness, environmental education and participation

#### 1. Key issues, elements and objectives

This sub-strategy involves four related issues. The recommendations seek to contribute to strengthening the role of civil society. Information and promotion of awareness are crucial for effective participation.

#### 2. Identification and evaluation of capabilities and options

- Educational system
- Existing networks of environment educators
- Media infrastructure and media networks
- Networks of NGOs, associations and other manifestations of civil society
- Capacity-building and training for public information

#### 3. Identification of likely obstacles and conflicts

- Diversity of languages
- Lack of access to accurate, complete and reliable information
- Complexity of scientific issues
- Scarcity of economic resources
- Lack of expertise

#### 4. Identification of actions for successful implementation

- Revision and enhancement of school curricula
- Incorporation of environmental sustainable development issues in training programmes

- Adoption of legislation and regulations concerning the access to information
- Involvement of local communities and NGOs
- Publications programmes
- Audiovisual programmes
- Pilot projects on participation and awareness
- Training manuals
- Contests (photography, articles, debates)
- Exhibitions
- Campaigns
- Public hearings

#### 5. Determining priorities for action

#### 6. Definition of a time frame

- Time span required for a strategic activity to produce desired results
- Selection of a starting point for each activity
- Time span for implementation

#### 7. Identification of actors and responsibilities

- Teachers
- Networks of environmental educators
- Media (press and TV)
- Local authorities
- Universities and schools
- NGOs and civil society organizations
- MCSD Secretariat

#### 8. Planning for action

- Determining needed resources
- Identification of sources of financing
- Budgeting and financing
- Allocation of resources
- Definition of organizational structure

#### 9. Monitoring and evaluation

- Reporting on implementation
- Review, revision and adaptation

## E. Sub-strategy for implementation of recommendations on indicators of sustainable development

#### 1. Key issues, elements and objectives

Indicators are needed for at least two purposes: for analysis and exploration of the relationship between variables and for policy planning, management and control. Indicators are needed on specific programmes on resources, activities, output, impact and objective achievement. It is now common to require indicators that describe the

status of the variables of sustainability, driving forces, processes and pressure. The key issues are design of a system of indicators for sustainable development and indicators on norms, status, input, output, processes, driving forces, pressure and performance-achievement.

#### 2. Identification and evaluation of capabilities

- Institutional and legal aspects of the gathering and use of indicators
- Economic cost of creating a system of indicators and keeping it up dated

#### 3. Identification of potential obstacles

- Sustainable development is complex
- Great diversity of variables
- Problems of quantification and harmonization

#### 4. Identification of actors and responsibilities

- Statistical institute or department
- Environmental observatories
- International organizations (United Nations, European Environmental Agency, OECD)
- MCSD Secretariat

#### 5. Actions to be implemented

- Meetings, workshops and seminars
- Promotion of training and capacity-building on the use of indicators
- Publication and dissemination of indicators

#### 6. Planning for action

- Determining needed human, technical and economic resources
- Definition of the organizational and administrative structure