

Concerted actions for the management of the Strymonikos coastal zone

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Abstract

The aim of the present project is to demonstrate the benefits of coordinated action for the conservation of coastal zones, by promoting the concerted management of the Strymonikos coastal zone. It is financed by the LIFE instrument and is part of the wider EU Demonstration Program on Integrated Management of Coastal Zones.

The activities of the project will include the description of the project area, regarding its abiotic, biotic, social, economic, and administrative features, the planning and initiation of a monitoring program for the zone's marine environment, the evaluation of environmental problems, the preliminary selection of domains of intervention and management measures. A Coordination Scheme, involving all bodies responsible for the project zone's management, will be established, which will set protection and management aims, decide on priority measures and coordinate their implementation. An information and monitoring center will also be established, which will function as an instrument to alert authorities on emerging environmental threats and to support environmental awareness activities, such as publication and distribution of awareness material, organization of conferences on concerted sustainable management of coastal zones, presentation of the project and of the EU policy regarding the sustainable use of coastal zone resources, media work etc.

Introduction

The importance of coastal systems to humanity is high; most of the world's population lives within 80 km of the coast (SOBEL, 1993). Both land and sea activities are concentrated at the coastal margins: tourism, recreation, fishing, mariculture, transportation, mining and energy industries, domestic and industrial waste disposal (CARTER 1991, GOLDBERG 1993). Coastal and other marine systems differ from terrestrial systems in several important ways, both with respect to patterns of diversity and with respect to the functional implications of those patterns. High diversity is found not only at the species level, but also at higher taxonomic levels (HEYWOOD & WATSON, 1995). Diversity of coastal systems is affected directly and indirectly by numerous human activities (CARTER, 1991). The complexity of most coastal zones indicates change. While defining and understanding the environmental issues facing coastal zones is crucial, the need to provide an effective executive structure for management is equally important.

The Commission has so far initiated and supported numerous actions addressing the environmental problems of the Union's coastal zones. It has been revealed that the main constraint to effectively face these problems is the lack of appropriate administrative mechanisms, enabling concerted positive actions. The Commission's concern on this matter is best expressed by the Communication from the Commission to the Council and European Parliament on the integrated management of coastal zones (COM(95)511 final). On the basis of this analysis, and in the light of the reactions of the Council, the European Parliament, the Committee (UNEP, Mediterranean Action Plan, 1993), as well as some NGOs, the Demonstration Program on Integrated Management of Coastal Zones has been set up. The program is a joint undertaking of three European policies and three services of the European Commission: Environment, Regional Policy and Fisheries.

The purpose of the demonstration program is to identify concrete actions that need to be taken for the implementation of Integrated Coastal Zone Management, to discuss these widely and to prepare for their adoption. What needs to be demonstrated is that improved co-ordination of parties influencing coastal zones evolution leads to sustainable development, as it is also referred in the 5th action program for the environment, where it is determined that the responsibilities for environmental protection must be shared by all who participate in the economic activities, including the government authorities, public and private enterprises, as well as the general public. Thus, the demonstration program is articulated around three key words: co-ordination, co-operation, concertation.

The demonstration program is composed of several demonstration projects implemented in target coastal areas around Europe. These projects will provide the raw material of the program, i.e. knowledge and expertise. Based on this evidence, the Commission will back its proposals, with regard to a European Strategy for Integrated Management of Coastal Zones.

In Greece, six of these demonstration projects are carried out. The present project with other two implemented in Cyclades and Magnesia are financed by the LIFE instrument, whose purpose is to contribute to the development and implementation of Community environmental policy. More specifically, our project falls in the third LIFE category, which concerns preparatory actions for the implementation of Community policy and legislation with respect to the protection and management of coastal zones. The other three out of the six demonstration projects carried out in Greece are financed by the TERRA program, which aims at supporting local and regional authorities seeking to cooperate in a European framework in order to improve spatial planning approaches and methods.

The aim of the present project is to demonstrate the benefits of coordinated action for the conservation of coastal zones, by promoting the concerted management of the Strymonikos coastal zone. The project will result in better planning of strategies and programs of environmental protection, in the development of cooperative instruments, in the identification of sustainable practices, in the promotion of social dialogue, in better regulation enforcement, and in raised awareness of the values of the zone and the benefits from concerted actions, which promote protection and sustainability and prevent further environmental deterioration.

Description of the project area

The coastal zone of Strymonikos Gulf is rich in natural resources, landscapes and cultural features. Moreover, the Strymonikos gulf is one of the richest fishing grounds in the North Aegean. The land area of the zone is extended over 26.249 ha and the sea area on 81.365 ha, that is a total of more than 107.614 ha and a coast line 123,55 km long (Figure 1). Within the project zone, three areas of 7.305 ha at whole are proposed to be included in the «Natura 2000» network (DAFIS & COLLABORATORS, 1996).

Human activities in the area include mass tourism, illegal housing, fishing, aquaculture, agriculture, silviculture and mining. These activities are not always practiced wisely leading to increasing environmental problems, such as pollution and landscape deterioration, which are expected to become by far more serious in the next 5 - 10 years, as a result of the expected enormous increase of tourists from the Eastern European Countries. Also, mining activities in Chalkidiki are changing and may pose additional threats to the environment. The Egnatia road which will connect Europe with Asia is now under construction. Finally, we must consider that River Strymon which comes from Bulgaria is also a possible source of pollution.

Effective environmental protection and sustainable management of this coastal zone is constrained by (a) the complex and sometimes conflicting jurisdictions of bodies involved in management, (b) fragmented land use planning, and (c) insufficient level of environmental awareness in almost all levels of decision making, which is mainly due to lack of information.

Technical description of the project

The project is divided in several tasks, which can be described as follows:

Task 1. Description

The description of environmental, social, economic, and administrative features, is the first essential step in planning integrated management and sustainable development. Thus, the objective of this task is to describe the project zone with regard to its features and values for Man, the state of the environment and the environmental management infrastructures. This is of particular importance, because no other similar study exists for the project area. The description will concern both the sea and the land area, and it will be in accordance with the philosophy of the Council Directive 92/43/EEC (1992) on the protection of habitat types and species and the “Natura 2000” network.

Task 2. Monitoring

The objective of this task is to diagnose possible threats to the marine environment and to propose measures in order to arrest environmental degradation. This will be done with a monitoring program of key parameters of the zone's marine environment, i.e. physico-chemical and eutrophication parameters, as well as population dynamics and

production of a selected marine macrophyte community in Strymonikos Gulf. This is because the eutrophication and/or pollution levels can be assessed by field observation on macrophyte community structure (PERGENT, 1991).

Task 3. Analysis

The objectives of this task are (a) to identify and evaluate causes of environmental problems and trends, (b) to set ideal aims for environmental protection and management, (c) to focus on selected domains (fields of action), and (d) to formulate a preliminary list of management measures for these domains.

The results of the analysis will offer the basis for the dialogue among all bodies involved in the zone's management.

Task 4. Concertation

The jurisdiction on the protection and management of the project zone's resources is enormously complex, often conflicting, and sometimes dubious, since it is shared by two regional directories, four prefectures, at least six ministries (Agriculture, Environment, Culture, Education, Defense, Merchant Marine, Tourism) and several town and village councils. Moreover, jurisdiction in certain matters is also shared with the semi-autonomous council of Athos monasteries.

Thus, the objectives of this task are (a) to promote cooperation among actors involved in the environmental protection and management of the zone, (b) to put comprehensive information at the disposal of actors concerned, in order to enable them to have real dialogue on the developmental and management options, and (c) to reach decisions on specific strategies and programs on selected action fields, in concertation with the actors concerned.

It must be noted that now is the opportunity to establish and test new cooperating instruments, because since 1994 the administrative structure of Greece has been radically changed from a heavily centralized to a decentralized one, allocating much of the authority for resource management to the local level.

Within the framework of this task, an informal Coordination Scheme will be established, which will set operational protection and management aims, decide on priority measures and coordinate the starting of their implementation. The Coordination Scheme will consist of representatives of the various levels of public administration, local authorities, and other bodies having a jurisdiction in domains greatly affecting the environmental protection and management of the zone.

The arrangement of meetings of actors involved in the environmental protection and management of the zone (members of the CS, NGOs, professional associations, associations of users etc.), is also included in the objectives of this task.

Task 5. Implementation of measures

Within the framework of this task, an Information Center for the protection of the coastal zone of the Strymonikos Gulf will be established. It will have multiple functions among which will be to promote cooperation, to alert authorities on emerging threats for the environment, and to support environmental awareness activities. The idea is to give this Information Center to the Local Authorities after the end of the project in order to continue the Public Awareness campaign.

Another objective of this task is to implement environmental conservation measures of high priority, which will be decided through wide participation.

Task 6. Environmental awareness & dissemination of knowledge

The objectives of this task are to disseminate the results of the project at local and national levels and to raise public awareness on the values of the project zone, on the EU and national policy on the integrated management of coastal zones, and on the need for positive actions through cooperation .

Within the framework of this task, the following will be implemented:

1. Organization of a conference on the coastal zones to present the approach and the results of the project.
2. Development of routes of communication with other similar efforts at EU level.
3. Media work (newspaper articles, press releases and TV/Radio interviews) .
4. Technical publications on the results of the project.
5. Issuing of information material (leaflets, posters) and distribution through the Information Center.
6. Presentation of the project and of the EU policy on the coastal zones at several local events organized in the wider area.

Results expected

It is expected that the project will produce the following main results:

- (a) Sustainable practices in resource use will be identified and the first steps to implement them through concerted approaches will be taken. Experience from similar projects aimed at the promotion of concertation will be utilized.
- (b) A dialogue will be initiated among the bodies responsible for management and coordination instrument(s) will be established.
- (c) A monitoring system will be formed which will help to prevent imminent environmental threats and check the effectiveness of management measures.
- (d) Protection of the project zone will be enhanced through the more effective enforcement of regulations and possibly through new regulations.
- (e) Environmental awareness will be raised of the public and of specific social groups such as civil servants, users of the coastal zone resources, and schoolchildren.

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Key words

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integrated management

EU policy

sustainable use

sustainable development

conservation

EU demonstration program

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