



## **Integrated Coastal Zone Management in Mediterranean Coastal Areas**

**Dora PAPATHEOCHARI<sup>1</sup>**

1. University of Thessaly, Department of Planning and Regional Development, Laboratory of Environment and Spatial Planning, Pedion Areos, 34334, Volos, Greece.

*thpapath@uth.gr*

### **Abstract:**

Coastal areas are considered to be highly attractive zones, combining important activities on land and sea, while their uniqueness has been a distinctive motive for people and activities to develop. On the one hand, the sea offers a rich natural environment that involves important ecosystems and productive land, and attracts marine and commercial uses. On the other hand, land affects the sea by offering services of transporting people and goods. This relationship is stronger in the case of coastal cities. The accumulation of human activities and natural ecosystems in the coastal zone has created the need for a common approach and an identification of the appropriate actions and policies. The result of this need was the introduction of the concept of the Integrated Coastal Zone Management (ICZM) in the beginning of the 90s. The goal was to manage the economic and social processes and the conflicted interests and to coordinate the actions of different sectors and involved stakeholders. The coastal areas of the Mediterranean are of great interest especially in the context of the preparation and future implementation of the ICZM Protocol of the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

### **Keywords:**

Coastal areas – Mediterranean coast – Integrated Coastal Zone Management

### **1. Introduction**

This paper aims at evaluating and comparing the characteristics, the management and planning systems of the Mediterranean coastal areas in the context of the ICZM principles. The objective of this paper is based on the increasing importance of the coast that usually constitutes a combination of intense human activities and fragile ecosystems. It should also be mentioned that this paper is a part of a doctoral dissertation in the Department of Planning and Regional Development of the University of Thessaly (Volos, Greece) on an early stage of preparation. By recognizing the most distinctive characteristics of important coastal Mediterranean areas, a comparative analysis will be attempted. The aim is to examine the similarities and differences in

DOI: 10.5150/cmcm.2009.080-1

coastal approaches. The basic question of the paper is whether the Mediterranean areas could be categorized and faced with common approaches concerning coastal management combined with spatial planning. The issue also here is to examine the Mediterranean coast as a unified region with common features and comparative advantages.

## **2. Integrated Coastal Zone Management**

In most cases, important issues of planning and development that are situated in the coastal area have been confronted with traditional methods and mechanisms that usually ignore the basic principles of the Integrated Coastal Zone Management. This leads to impacts such as the degradation of quality of the coastal ecosystems and water, the reduction of urban development prospects, the degradation or privatization of public spaces and the lack of an integrated urban management (ENCORA NETWORK, 2007). The strategic goals of ICZM include the protection of the natural resources, the preservation of the quality of the environment and the attractiveness of the coastal zone. Through the Agenda 21, the United Nations plan of action for the human impacts on the environment, there has been an emphasis on the relationship between the urbanization and the integrated management of the coastal zone because of the impacts of the climate changes on the coastal ecosystems and the transformations in the urban landscape in the context of globalization (NICMM/RIKZ, 1997).

Integrated Coastal Zone Management is considered to be a dynamic tool for promoting sustainable development in the coast. The term 'integrated' refers to the integration of goals and the tools for their achievement. Generally, it could be said that, the term 'integrated' refers to four dimensions of integration: spatial, temporal, horizontal and vertical (LESP, 2005).

## **3. Mediterranean Coastal Areas**

Mediterranean countries vary in spatial, social, economic and environmental characteristics. Moreover, they are characterized by various legislative systems, planning tools, approaches and goals creating a series of examples with one common point of reference, the Mediterranean coastal zone. The threats and pressures that have been noticed in the Mediterranean coastal zone have often engaged the scientific community while the need for their confrontation is constantly increasing. The intense urbanization and the pollution in those areas constitute the most important, complex and interrelated problems that ought to be examined under an integrated management framework.

Managing and controlling the urbanization of the Mediterranean coastal zone demands interventions in a national and regional level because each country shows specific characteristics (political, social, environmental, economic etc.). Urban population in the Mediterranean coastal countries passed from 90 million in 1950 (42% of total

population) to 290 million in 2005 (63%). The Southern and Eastern countries report accelerated urbanization (3.6% over the period 1970-2000). By 2025, urban population would reach 220 million in the Eastern and Southern countries (151 million in 2005) and 156 million in the countries of the European rim (140 million in 2005). A third of this growth would take place in the Mediterranean coastal regions (UNEP/MAP, 2008).

#### **4. Evaluation of ICZM in the Mediterranean Coast**

In an EU level, recent research on the evaluation of the implementation of ICZM actions in the countries of the North Mediterranean has revealed an initial categorization, taking into consideration factors such as the level of implementation of ICZM in each country, their involvement in their legal framework, the level of the actions' decentralization, the participation of the involved stakeholders and the effective cooperation between different levels of planning (EC, 2007). According to the same research, the factors leading to a successful approach of the coast are:

- The small size as opposed to the great importance of the coast in relation to the country's size.
- The cooperation and distribution of activities between different levels of governance.
- The political will on the part of the state.
- The connection between political/administrative changes and the needs of ICZM.
- The use and enforcement of existing bodies involved in ICZM processes.
- The initiatives for ICZM with an active participation of different actors and levels.
- The reliable financial resources for ICZM.
- The specialized staff and the effective management of coastal issues in each level.
- The active participation of public environmental organizations.
- The rejection of the impression that ICZM could be achieved through spatial planning.

*Table 1. Evaluation of ICZM implementation in three Mediterranean countries.*

	<b>Italy</b>	<b>Greece</b>	<b>Tunisia</b>
Integrated thematic and geographic perspective	No	Partly	Partly
Long term perspective	Significant gaps	Partly	Partly
Application of a management approach in process	No	No	Partly
Local actions involved	No	Significant gaps	Partly
Respect and work with natural processes	No	Significant gaps	No sources
Participatory procedures	Significant gaps	Significant gaps	No sources
Involvement of all relevant stakeholders	No	Significant gaps	Partly
Combination of planning and management instruments	No	No	Partly

Based upon the research, Spain and France show the best results, countries such as Greece and Malta are in an initial stage of preparation -in terms of actions- while Turkey's and Italy's systems are considered to be far from the ICZM principles. The results of the aforementioned research by the EC for the case of Greece and Italy as well as some first estimation for Tunisia are presented in the table below.

## **5. Conclusions**

The need for an integrated approach of the coast becomes more and more imperative because the coastal zone constitutes an area that concentrates economic, physical and social activities with different goals and priorities and affects various spatial processes in various ways. Moreover, they are areas that usually host a variety of sensitive ecosystems and demand a special attention on the part of policies and actions. The existing efforts and actions that have been implemented in most cities for managing the coexistence of land and sea have proved to be extremely inadequate to solve severe problems (such as land use conflicts, environmental degradation) and achieve sustainability. In the Mediterranean areas examined above, the lack of policies and instruments to that direction are very significant although most Mediterranean countries seem to be on an early stage of planning and coordinating such policies.

## **6. References**

- ENCORA NETWORK (2007). *European Coastal Action Plan*. Paris.  
[URL [http://www.coastalwiki.org/index2.php?option=com\\_docman&task=doc\\_view&gid=255&Itemid=44](http://www.coastalwiki.org/index2.php?option=com_docman&task=doc_view&gid=255&Itemid=44)]
- EC -European Commission- (2000). *Towards an Integrated Coastal Zone Management*.  
[URL <http://ec.europa.eu/environment/iczm/home.htm>]
- EC -European Commission- (2007). *Evaluation of Integrated Coastal Zone Management (ICZM) in Europe*. COM(2007)308 final of 7 June 2007.
- LESP -Laboratory of Environment & Spatial Planning- (2005). *Towards an Urban Regeneration Policy in Mediterranean Coastal Cities*. University of Thessaly-General Secretariat for Research & Technology. Ministry of Development. Volos.
- NICMM/RIKZ -National Institut for Coastal & Marine Management/RIKZ- (1997). *Trans-disciplinary Euroconference on Coastal Management Research, Conference Report*. San Feliu de Guixols, Spain. 6-10 December 1997. The Netherlands: Rijkswaterstaat.
- UNEP/MAP (2008). *The Blue Plan's Sustainable Development outlook for the Mediterranean*, France, Sophia Antipolis: UNEP/MAP/BLUE PLAN-RAC  
[URL [http://www.planbleu.org/publications/UPM\\_EN.pdf](http://www.planbleu.org/publications/UPM_EN.pdf)]