

## Special Article: Coastal Studies

# The Connections between Natural Goods and Cultural Heritage in the Coastal Management of Italian Seaboard within ICZM Process

**Cantasano Nicola\***

Researcher, Retired, National Research Council of Italy, Institute for Agricultural and Forest Systems in the Mediterranean, Rende Research Unit, Cosenza, Italy

**\*Corresponding author: Cantasano Nicola**

Researcher, Retired, National Research Council of Italy, Institute for Agricultural and Forest Systems in the Mediterranean, Rende Research Unit, Cosenza, Italy. Email: [cantasano@tiscali.it](mailto:cantasano@tiscali.it)

**Received:** May 25, 2023**Accepted:** June 28, 2023**Published:** July 05, 2023

## Introduction

The relationship Man-Sea is, always, a source of adverse interests and social tensions that have assumed in these last decades a special importance. The rough development of human activities in coastal areas has produced an overloading and, in some serious cases, an overcoming of the carrying capacities of coastal ecosystems. In a changing coastal landscape, the coastline is, really, a transition area between land and sea. These different environments contain inside their borders a great variety of species, some of which are actually endangered, but also a lot of cultural goods actually threatened by coastal erosion, landslide events and human pressures. Really, these natural and cultural resources are restricted in time and in space and, therefore, it is necessary to protect them at both sides of this frontier. The coastal zone could become an important driving force for the potential development of national economy (Figure 1), owing to the large number of economic activities confined to this narrow transition area between land and sea.

One of the most effective means to fight against the decay of cultural goods and to solve the progressive and increasing process of biodiversity loss, is to realize a strategic plan for the protection of cultural and natural resources still existing in Italian coastal regions. So, it is proposed the application of an Integrated Coastal Zone Management (hereafter ICZM) plan able to

## Abstract

Natural and cultural heritage are two sides of the same coin in the coastal management of Italian seaboard areas. These different aspects must merge each other to achieve a dynamic equilibrium for a sustainable development of the coastal region. In Italy, littoral areas are important buffer zones between terrestrial and marine environments where ecosystems and priority areas could develop in time although they are, actually, threatened by an increasing human pressure. It is necessary, therefore, to reverse this trend and to realize, at regional and national levels, an integrated coastal zone management enlarging this kind of approach from coastal areas to continental ones so to improve, in the same landscape unit, the valuable Italian cultural heritage. This new outlook needs integration between different levels, such as scientific, administrative and political sectors all involved in a right governance able to connect coastal management with the preservation of the natural and cultural goods, supporting the social and economic development of local communities.

**Keywords:** Coastal management; Natural goods; Cultural heritage; Integration

include, in the same landscape unit, cultural and natural heritage. In ICZM implementation, the spatial planning of coastal landscape should include the following elements [1]:

- Identification of marine and terrestrial priority areas using all the existing data;
- Analysis of suitable legal frameworks for an effective zoning of Marine Protected Areas (MPA);
- Creation of a regional zoning plan for the implementation of cultural and natural goods linking all the national and regional levels of management.

This new model of territorial planning could overcome the managing shortcomings still existing on coastal landscapes. According to this new kind of holistic and global approach, biodiversity and cultural conservation must include the following elements [2]:

1. Definition of boundaries for the protection of the current levels of biodiversity;
2. Territorial planning for the improvement of cultural goods based on ICZM principles;
3. Monitoring of marine and terrestrial heritage in the

coastal region;

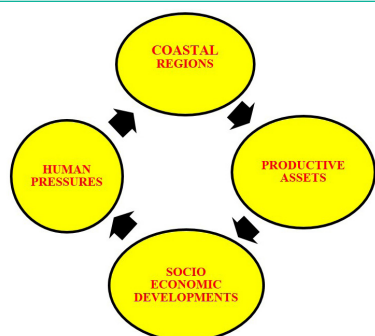
4. Support of a policy-making system for an effective management of littoral areas.

So, ICZM program could become the driving force to protect marine biodiversity and, above all, to maintain a sustainable use, in the long run, of natural and cultural resources. In this way, ICZM is an active and continuous process to protect biodiversity conservation and to realize the right balance between environmental protection and a sustainable use of natural resources not only for the socio-economic development of the coastal region, but also for supplying new social and economic chances to local communities.

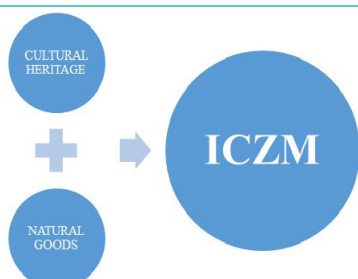
This process of integration between marine and terrestrial environments is, really, one of the key issues in ICZM implementation [3,4]. Therefore, a sound management of coastal zones should extend the conservation actions, aimed to protect cultural and natural goods from coastal areas to continental ones and vice versa [5], considering terrestrial and marine environments as integral parts of a whole landscape unit [6]. Really, Italian countries hold a rich cultural heritage, mostly located in littoral regions [7], where ICZM could play a central role (Figure 2) to realize a sustainable development of coastal regions and conditions of economic growth for local people [8].

Along Italian coasts, where many natural and human factors are related, it is necessary to integrate the national cultural heritage into coastal management, according to an ecosystem approach but, all the same, joining scientific and cultural issues in the same landscape unit. By this way, it is established a new kind of approach based on the principle of “wide areas” [9] where coastal regions become cultural expression joining the intrinsic value of natural goods [10] with the presence of human being [11].

The core issue of this new landscape pattern, based on ICZM process, develops from the protection of some vulnerable species to a global approach able to extend its range of action from a spatial scale, like a dot, to an overall and holistic vision, according to a new kind of landscape order based on the principle of “wide areas” [9] (Gambino, 2004). This new outlook extends



**Figure 1:** A pattern of socio-economic development in coastal management.



**Figure 2:** Central role of ICZM in coastal management.

from projects at short and medium times to programs at long run where coastal areas become cultural expression and the man integral part of natural ecosystems. The guidelines of this new kind of approach are [12]:

1. Adaptive management
2. Ecological modeling and monitoring
3. Temporal scale of management
4. Spatial scale of management
5. Stakeholder participation
6. Program indicators

In conclusion, integration is the key word to coordinate all the initiatives at public and private levels, the different industrial sectors and the local communities towards long-term outcomes [13]. The Integrated Coastal Zone Management becomes the main road for a sustainable development of seaboard areas through a global approach able to connect a right and sound management of cultural goods, the preservation of biodiversity levels and the socio-economic development of coastal regions.

## References

1. Agardy T, Notarbartolo di Sciarra G, Christie P. Mind the gap: Addressing the shortcomings of marine protected areas through large scale marine spatial planning. *Marine Policy*. 2011; 35: 226-232.
2. Bin C, Weiwei Y, Senlin Z, Jinkeng W, Jinlong J. Marine biodiversity conservation based on integrated coastal zone management (ICZM). A case study in Quanzhou Bay, Fujian, China. *Ocean and Coastal Management*. 2009; 52: 612-619.
3. Cicin-Sain B. Introduction to the special issue on Integrated Coastal Management: concepts, issues and methods. *Ocean and Coastal Management*. 1993; 21: 1-9.
4. Clark JR. Coastal zone management for the new century. *Ocean and Coastal Management: concepts, issues and methods*. *Ocean & Coastal Management* 1997; 37: 191-216.
5. Guerry AD. Icarus and Daedalus: conceptual and tactical lessons for marine ecosystem-based management. *Frontiers in Ecology and the Environment*. 2005; 3: 202-211.
6. Kelleher G. Guidelines for marine protected areas. Gland, Switzerland and Cambridge, UK, IUCN 1999, XXIV: 1-107.
7. Vallega A. Focus on integrated coastal management – comparing perspectives. *Ocean & Coastal Management*. 2001; 44: 119-134.
8. Sanò M, Medina R. A system approach to identify sets of indicators: Applications to coastal management. *Ecological Indicators*. 2012; 23: 588-596.
9. Gambino R. Conservazione e pianificazione dei sistemi di area vasta. In: *Atti Conv. Naz. WWF ITALIA ONG ONLUS*. 2004; *Ecoregioni e reti ecologiche*, Roma, Italia: 24-36. (In Italian).
10. Vallega A. A conceptual approach to Integrated Coastal Management. *Ocean & Coastal Management*. 1993; 21: 149-162.
11. Naveh Z, Lieberman AS. *Landscape ecology. Theory and Applications*, 2nd edn. Springer. 1994, New York.
12. Forst MF. The convergence of Integrated Coastal Zone Management and the ecosystem approach. *Ocean & Coastal Management*. 2009; 52: 294-306.
13. Cantasano N, Pellicone G. Marine and river environments: A pattern of Integrated Coastal Zone Management (ICZM) in Calabria (Southern Italy). *Ocean & Coastal Management*. 2014; 89: 71-78.