

# Development of a System of Indicators for ICZM in the Balearic Islands - ES

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

## 2. Key Approaches

- Integration
- Participation
- Knowledge-based
- Ecosystems based approach

## 3. Experiences that can be exchanged

A system of indicators for ICZM in the Balearic Islands has been developed as a policy, planning and technical tool. It is being implemented as part of a larger ICZM governance system and used to guide decision-making and policy development. It can be applied at multiple spatial and temporal scales.

## 4. Overview of the case

The process for developing the system, including the indicators themselves (adapted to local realities) could be replicated in other locations.

## 5. Context and Objectives

### a) Context

The Balearic Islands are an autonomous community of Spain and one of Europe's leading sun, sea and sand tourism destinations. They are made up of the four main islands of Mallorca, Menorca, Ibiza, and Formentera, plus the smaller island of Cabrera, a land and sea National Park. The islands cover an area of 497 000 ha, with a coastline of 1428 km and had a population of just over one million in 2006. In 2007, 13.3 million tourists (9.8 million foreigners, 3.4 million Spanish) visited the islands. The islands face similar sustainability challenges as other coastal areas (habitat degradation, pollution, erosion, urbanization, natural resource use, etc.). The fact that they are islands and a mature tourism destination exacerbates problems such as seasonal pressure on natural resources, residuals and unplanned coastal development, making the achievement of sustainability in the coastal zone all the more important and challenging. The need to address these challenges through sustainable development of the coast is recognized at the civil society level in the Islands (e.g. Chamber of Commerce of Mallorca, Formento del Turismo, Unions), yet there is a significant lack of baseline science and a governance structure to support related actions.

### b) Objective

The primary objective was to develop a system of indicators for ICZM in the Balearic Islands that is scientifically viable, comparative internationally yet locally relevant, and to facilitate its implementation. Other objectives were (1) to generate scientific knowledge related to coastal social-ecological systems, (2) to develop techniques, frameworks and tools to help implement ICZM, and (3) to enable the transfer of scientific knowledge and innovation to society and decision-makers.

## **6. Implementation of the ICZM Approach (i.e. management, tools, resources)**

### **a) Management**

The project was managed by the Autonomous Regional Government of the Balearic Islands and conducted by the Mediterranean Institute of Advanced Science (IMEDEA), a joint research institute of the Spanish National Research Council (CSIC) and the University of the Balearic Islands (UIB), in collaboration with the Economic and Social Council of the Balearic Islands, a public, legal entity that represents the needs of civil society and provided formal advice to the government about societal issues. Since 2009, the project (now in the implementation phase) has been continued within the SOCIB, a coastal ocean observing system in the Balearic Islands, a research consortium established in 2009 that is funded by the regional and national governments. The Balearic Statistics Institute (IBESTAT) and the Socio-environmental Observatory of Menorca (OBSAM) have been collaborating in the implementation (pilot) phase of the project.

### **b) ICZM tools**

In 2005, the Government of the Balearic Islands (DG Research, Technological Development and Innovation) and the Mediterranean Institute of Advanced Studies (IMEDEA (CSIC-UIB)) initiated the R+D+I (research, Technological development and innovation) ICZM project in the Balearic Islands (2005-2008). The overall objective of this project was to generate scientific knowledge to help achieve sustainability within an Integrated Coastal Zone Management framework, with specific focus on the Balearic Islands as a case study.

One of the major outcomes of the R+D+i ICZM project was the development of a System of Indicators for ICZM in the Balearic Islands. This project, which was initiated in 2006, was carried out by IMEDEA (CSIC-UIB) in partnership with the Economic and Social Council of Mallorca (CES), an organization with legal competence to represent the opinion and the needs of civil society and relate these opinions to government through official opinion papers (Dictamen). Methods for this project included a participative process of defining core objectives, selecting and adapting internationally accepted and tested indicators to be relevant at the local level, ranking of the usefulness and importance of each indicator using a series of quantified categories and a Delphi Study, and, based on this, the development of a system of indicators and an associated implementation plan. In December 2007, the system and implementation plan was formally adopted as a Dictamen by the CES, and presented to the Government at the end of 2008. In 2009 a pilot project was initiated on the island of Menorca by SOCIB in collaboration with the Balearic Statistics Institute (IBESTAT) and the Socio-environmental Organisation of Menorca (OBSAM). A pilot study, which is currently being extended to the island of Mallorca, is testing and adapting the implementation plan for the indicators system, promoting coordination among relevant agencies, further developing and standardising the methodologies of measurement, and integrating the system into a broader ICZM governance structure for the islands.

## **7. Cost and resources**

To date, the costs incurred by the project have been personnel related and the pilot study has depended upon available data and voluntary collaboration among the partners. If the system of indicators were to be fully implemented, additional personnel and technology would be necessary. These costs are described (in general terms of personnel, time, and technology) in the implementation plan for the system. The resources required will be dependent upon the level of commitment and current resources of the administrations that will need to collaborate to implement the system fully.

## **8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)**

The primary objective of developing a system of indicators for ICZM in the Balearic Islands was achieved in the appropriate timescale. The publication of the Dictamen, endorsed by the regional government, and the implementation of the pilot projects are all positive steps towards the ultimate goal of integrating the system into a broader ICZM governance structure in the

islands. The continued success of the initiative will be contingent upon available resources and political interest.

## 9. Success and Fail factors

The equal commitment and active working relationship (i.e. periodic meetings, clearly defined roles) between the partners (IMEDEA and CES) during the development of the system of indicators was a key factor in ensuring the successful and timely completion of the work.

Decision-making in the islands is distributed among a number of overlapping political scales (e.g. autonomous community, municipality, national, island). The absence of a coordinated governance system for ICZM in the islands has been a major challenge for the implementation of the system. Data access, consistency and availability have posed additional challenges in the implementation phase.

## 10. Unforeseen outcomes

The Government of Canada (Department of Fisheries and Oceans (maritime regions)) is using the process to develop indicators to inform their national policy.

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## 13. Sources

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Balancing science and society through establishing indicators (361.17 KB) 



Sistema de indicadores para la gestion integrada de la zona costera (9.19 MB) 



System of indicators for ICZM in the Balearic Islands (18.11 MB) 