

An indicators-based approach to evaluate sustainable coastal development – Europe

1. Policy Objective & Theme

- ADAPTATION TO RISK: Managing impacts of climate change and safeguarding resilience of coasts/coastal systems
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

2. Key Approaches

- Integration
- Participation
- Knowledge-based
- Ecosystems based approach
- Socio-economic
- Technical

3. Experiences that can be exchanged

The case describes the methodology and the calculation experience in six EU countries that can be used to measure a number (27) of indicators of sustainable development of the coastal zone.

4. Overview of the case

The work entailed the development of a methodological framework so that twenty seven indicators of sustainable development (SD) could be compared around the European littoral. The framework also included a Standard Indicator Format, a Reporting Sheet and an Indicator Fact Sheet.

5. Context and Objectives

a) Context

For the implementation of ICZM, the Directorate-General of Environment (DG-ENV) of the European Commission set up the European ICZM expert group. It is composed of all 22 coastal Member States. This expert group recognized the importance of indicators and created an "indicators and data" working group (WG-ID) led by the European Topic Centre on Terrestrial Environment. The WG-ID was instructed to draw up a list of indicators and assist in coordinating the definition of the way in which the Member States should calculate the indicators. At the end of 2003, after a thorough review of all existing indicators for the coast and for Sustainable Development (SD), the WG-ID proposed that Member States and candidate countries employ two sets of indicators to be used alongside each other. One set should measure the progress of the implementation of ICZM i.e. a Progress Indicator Set (the subject of a separate case study). The second set should be able to monitor sustainable development of the coastal zone i.e. a Sustainable Development Set. A core set of 27 SD indicators, composed of 46 measurements, was put forward and rigorously tested. Using the two indicator sets together would give an indication as to whether progress was being made in the implementation of ICZM and whether that progress was actually leading to increased sustainability at the coast. The indicators measuring progress in achieving sustainable development of the coast will in turn feed back to give policymakers an indication of the need for further action in ICZM.

The 27 SD indicators were grouped into seven “goals” viz. To control further development of the undeveloped coast as appropriate, To protect, enhance and celebrate natural and cultural diversity, To promote and support a dynamic and sustainable coastal economy, To ensure that beaches are clean and that coastal waters are unpolluted, To reduce social exclusion and promote social cohesion at the coast, To use natural resources wisely, To recognise the threat to coastal zones posed by climate change and to ensure appropriate and ecologically responsible coastal protection. The 27 SD indicators, composed of 46 measurements, was put forward and tested.

b) Objectives

To give a common methodological framework for calculating and reporting the 27 SD indicators (based on the availability of data, calculation experiences and the analysis of the weaknesses and strengths of the development and testing process). The work also illustrates the usefulness of the coastal indicator approach to develop ICZM within EU, national and regional strategies and planning.

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

a) Management

The work was led by the Government of Catalonia and involved the following institutions: El Prat de Llobregat local council, Spain, Viladecans local council, Spain, Autonomous University of Barcelona – European Topic Centre on Terrestrial Environment (ETC-TE), European Environment Agency, Spain, French Institute for the Environment (IFEN, representing the French Ministry for the Environment), Malta Environment and Planning Authority (MEPA), Malta, Province of West Flanders, Belgium, University of Latvia, Latvia, and the Maritime Institute in Gdansk, Poland.

b) ICZM tools

In order to be able to measure the individual indicators, a common framework was needed in order to benchmark, compare and visualise the state of the coast in Europe. Therefore, a Methodological Framework for the full set of 27 indicators was drawn up. This framework consists of (1) a Standard Indicator Format which defines and describes the methodology of calculation for each measurement, (2) a Reporting Sheet which captures the results of calculations in terms of output (data, graph or map) and evaluation of the obtained values and data production process, and (3) an Indicator Fact Sheet which summarises and disseminates the main information obtained by partners on each indicator. The graphs, maps and comparative analysis are its main components.

7. Cost and resources

No costs are available.

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

The Methodological Framework provides a powerful tool for a standardised measurement of the current state of the coast, to support better-informed decision-making and to promote objective and transparent communication on the efficient use of public funds. Its explanatory and suggestive power is particularly useful to show trends and linkages between related policy domains.

9. Success and Fail factors

The standardisation of methodology and formats for compilation and presentation of results ensures the comparability, correct assessment and aggregation of the results obtained in different countries and at different scales around Europe. Moreover, the identification of data gaps or limitations will allow prioritisation of effort on the monitoring of required datasets. The Indicators Guidelines contribute to the analysis of the indicators-based approach as a common tool to support the policy integration

process since common indicators streamline integrated information management among different stakeholders. However, good, reliable data sets are required.

Unfortunately, there is still no final agreement on the common indicators to be used around Europe's littoral. The general opinion is that some of the indicators are only regionally valuable and there are too many to be measured. Nonetheless, the methodological framework is now in place for those that may eventually be chosen. Many of the indicators are not, in most cases, a measurement of true sustainability but are more related to state-of-the-coast indicators.

10. Unforeseen outcomes

None.

11. Prepared by

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12. Verified by

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13. Sources

- Indicators Guidelines: To adopt an indicators-based approach to evaluate coastal sustainable development (2007)
Martí X., Department of the Environment and Housing, Government of Catalonia, Spain
- www.deduce.eu (where the components of the methodological framework can be downloaded).



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