

Science for Environment Policy

Balanced Scorecard tool could support Integrated Coastal Zone Management

A strategic management tool used to monitor progress towards organisational goals can be adapted to Integrated Coastal Zone Management (ICZM), according to a new study. The researchers adapted the Balanced Scorecard for the Mediterranean region, and suggest that such an approach could be applied to other marine regions.

Coastal zone management has mainly been fragmented and localised, focusing on specific sectoral activities, and linked in many cases to demonstration projects supported by the EU. Consequently, policies have sometimes been implemented inefficiently or have even been contradictory.

In 2002, the EU recommended that Member States implement a [strategic approach¹ to managing and protecting Europe's coastline](#). In 2011, the Contracting Parties to the Barcelona Convention, including the EU, established a [binding Protocol to make ICZM compulsory for States bordering the Mediterranean Sea](#); this included the participating EU Member States.

The Balanced Scorecard was initially developed as a tool for businesses, incorporating both financial and non-financial data. It aims to map a set of criteria to assess current performance – and the gap between expected and actual performance – when implementing a strategy. It therefore helps managers align performance with organisational goals and enables them to check that the strategy is achieving the desired results.

To help implement and manage the municipal, district and regional strategies for Mediterranean ICZM, the researchers optimised the Balanced Scorecard template, reorganising its structure to match that of the Protocol, and to account for the different priorities required by public organisations, as opposed to businesses.

The process starts with identifying the 'vision' and 'mission' of the ICZM plan or programme. This is followed by a Strategy Map, which identifies four perspectives, each with its own goals, outcome measures and initiatives, which are linked by hypotheses about the cause-and-effect links between drivers and outcomes. The four areas of context chosen as particularly relating to public bodies working on ICZM were: Financial, Internal Processes, Learning and Development and Coastal Communities. The aim is to balance these four perspectives in a holistic manner. In this way, this adapted Balanced Scorecard approach describes a network of feedback mechanisms that allow interventions to be assessed across the entire ICZM plan.

Derived from the vision and mission, and for each of the four perspectives, the plan then identifies Strategic Objectives that drill down to Initiatives: concrete actions that answer the question 'How do we do it?' The researchers advise that each Initiative is assigned a budget, the sum of which represents the budget for the appropriate Strategic Objective, allowing financial flows to be optimised and making it easier to reschedule financial commitments on the basis of progress.

The adapted Balanced Scorecard can also be used to identify performance indicators, which can be split into two groups. The researchers give an example of a Driver Indicator – where the scope is to measure significant change in coastal and marine habitats and species – as 'increase migratory bird species on salt marshes by 4%'. An Outcome Indicator (where the scope is to preserve coastal zones for current and future generations) could be 'decrease the number of environmental crimes committed in protected areas'.

A Balanced Scorecard approach to ICZM aims to lay out the relationships and individual actions necessary to achieve Strategic Objectives at a wide scale, then monitor and manage actual progress against concrete targets at an organisational level. While the researchers consider the cause-and-effect chains in this kind of approach to be logical and probabilistic rather than mathematical and deterministic (and they warn that if the map is not planned properly, it can transfer management errors to the entire framework), they say this approach can enable a greater level of understanding and comprehension of ICZM.



October 2014
Thematic Issue 46

Coastal Zones

Subscribe to free
weekly News Alert

Source: Maccarrone, V., Filiciotto, F., Buffa, G. *et al.* (2014) The ICZM Balanced Scorecard: A tool for putting integrated coastal zone management into action. *Marine Policy*: 44: 321–334.
DOI:10.1016/j.marpol.2013.09.024.

Contact:
vincenzo.maccarrone@amc.cnr.it

Read more about:
[Marine ecosystems, Sustainable development and policy assessment](#)

The contents and views included in Science for Environment Policy are based on independent, peer-reviewed research and do not necessarily reflect the position of the European Commission.

To cite this article/service: "Science for Environment Policy": European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.

1. Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe. See: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32002H0413>