

INTEGRATIVE COASTAL ZONE SUSTAINABILITY

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Coastal zones are precious ecologies. Over a long period of time diverse agencies have interacted. At the Belgian coast, water, land, wind and sun have been shaping a complex and paradoxical bio-physical milieu, with different characteristics depending on location and moment. While the contact between water and land is a given, the line of contact is constantly moving. While nature is the dominating force, man is perverting the balance. While subsistence economy sustained the initial human presence, luxury recreation has become the dominant economy. While sea and land need each other badly, they turn their back at each other. This coastal formation of interactive diversities and dynamic interdependencies is a highly adaptive but fragile system. Its self-organizing capacities seem to have reached certain limits. A new and 'strong' story is needed if we want this spatial system to continue as an adaptive, open ecology.

Integrated coastal zone management (ICZM) is part of this story. However, as the European Commission states, the institutional circumstances for ICZM are all but favourable.

"Yet, coastal planning activities or development decisions still take place in a sectorial way, hardly being linked to each other. This fragmented approach to planning and management leads to inefficient use of resources, conflicting claims on space and missed opportunities for more sustainable coastal development." (European Commission, 2012)

As a reaction to this situation, already in 2002 the European Parliament and the Council adopted some recommendations for a more effective coastal planning and management. The main principles include "the need to base planning on sound and shared knowledge, the need to take a long-term and cross-sector perspective, to pro-actively involve stakeholders and the need to take into account both the terrestrial and the marine components of the coastal zone." (European Commission, 2012)

Since 2009 the European Commission has launched initiatives to review the recommendations. The need for new instruments is concluded.

The main aims of this paper are:

to describe the most important challenges and opportunities of the coastal zone and problematize those;

to outline basic principles of a framework which can cope with these challenges;

to suggest building blocks for the implementation of such a framework.

Reading the coastal zone

Many coastal zones face problems of deterioration and decay. Natural resources are spoiled and become depleted, threatening economic and cultural development. Climate change is expected to expose the coast to flooding, erosion and watershed degradation. Migration is stimulating income divides and generating socio-economic monocultures. Traditional economic activities are can hardly survive and diversification is weak.

Governance has a very local and 'autarchic' character. Real estate quality is substandard in physical and morphological terms ... This list of main challenges demands for the mobilization of local and specialized knowledge. Imaginative initiatives have to be deployed, effective measures have to be taken.

Such initiatives can be built upon a very attractive conglomerate of diverse and attractive geomorphological subzones (sea, beach, dunes, polders), a multitude of NGO's and ad hoc organizations, some with a coast-wide ambition (Coördinatiepunt Duurzaam Kustbeheer, Westtoer, Beaufort ...), performant infrastructures ...

A strong story as integrative framework

Future EU instruments and actions will certainly have to stress and assess potential environmental, social and economic consequences of new initiatives (European Commission, 2012). Promoting development along these Planet-People-Prosperity-dimensions or Environment-Equity-Economy-aims can lead towards a more sustainable (coastal) development (New Jersey, 1999; Knox and Mayer, 2009). Their integration and simultaneous development can serve as a measure for/of sustainable development (Newman and Kenworthy, 2003; Schreurs, 2007a). Integrated coastal zone management can certainly be built upon these dimensions.

However, such a complex situation does not only need an integrated framework. Such a frame should be a dynamically integrating planning process. Its quality "is determined by the ways in which vision, knowledge and democratic legitimacy are interwoven and embedded in the process of articulation and coordination" (Hajer, Grijzen, and van 't Klooster, 2010:)

Since sectorial divides and political fragmentation are ruling most of the time, an alternative for the 'business-as-usual scenario' has to be made. Integrating coastal zone sustainability therefore starts from the conviction that two dynamic fields of action have to be continuously interactive: imagination and realization.

An ambitious vision on future development is needed. It has to be the result of collective imagination. The question 'what kind of coast we want' needs reality check from designerly research. Designerly competence can stimulate debate and enrich the process of collective envisioning (Schreurs, Martens, 2005).

Complex partnerships are needed to realize transformations which fight problems and realize hopes. Depending on location and issues, constellations of shareholders (the ones directly and compulsory involved) and stakeholders (the ones indirectly involved or merely interested) have to organize themselves. Depending on advancing opinions and time horizons, shifts amongst and between those constellations can be expected.

Designerly research and evolving governance will be the main integrating 'threats' for a strong story about the coast.

Building blocks for an integrating framework

On several occasions already, we have been involved in the making of building blocks for such a 'strong story'. Partially they are even already tested with local and regional stakeholders. The main moments of production are:

coproduction with stakeholders at the Belgian coast, of a 'language for quality', applied to six challenging situations at the Belgian coast (Schreurs, 2006);

interactive mutual enriching of project definitions and research by design (Schreurs, 2007b);

development and demonstration of a methodology for the actualisation of a strategic policy plan for tourism at the coast (Vanhaverbeke, Schreurs and Vandeven, 2009)

identifying an alternative approach and criteria to assess centrality in small and medium sized cities in a dynamic way (Loopmans et al., 2010)

developing a vision on involving privileged witnesses and stakeholders of the coastal network using research by design: (Martens, Schreurs and Wauters, 2011)

coaching research by design about opportunities to strengthen sustainable development at the coast (with focus on Ostend) during Studio Strategic Spatial Planning, Master Urbanism and Strategic Planning, department of Architecture, Urbanism and Planning, KU Leuven (academic years 2010-2011 and 2011-2012)

These building blocks contain all necessary ingredients to construct an approach for Integrative Coastal Zone Sustainability. The paper will explore the threads of this 'strong story'.

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