

Are Systems Approaches Relevant to European Integrated Coastal Zone Management?

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Format of Presentation

- •Overview of European ICZM development & implementation
- •Revisit the SPICOSA project aims
- •Results of lessons learned survey
- •Exit strategy









The ICZM Context









Remember This? SPICOSA Project Aim

SPICOSA's overall aim is to develop a, "self-evolving, holistic research approach and support tools for the assessment of policy options for sustainable management through a balanced consideration of the ecological, social and economic aspects of Coastal Zone Systems".

Create an operational Systems Approach Framework (SAF) of the coastal zone for assessments of policy alternatives.

SPICOSA Study Site Applications









What Was The Theory Again?





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Simplified Key Steps of the SAF





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SAF/ ICZM Review

Aim of review:

Preliminary view of how a systems approach has contributed to ICZM at 4 sites, this was extended to 10.

In particular:

- 1. implementation of ICZM Principles
- 2. strategic management of coastal zones
- 3. technical management of coastal zones
- 4. capacity for action of stakeholders
- 5. limitations of systems approaches in ICZM practices.









Summary of Study Sites

Study Site	Area	Pre- Existing ICZM	Stage of ICZM Development at Start
Scheldt	22000km ²	yes	developing to w
Cork	1200km ²	yes	well developed
Barcelona	5 km²	no	not developed
Guadiana	30km ²	yes	infancy
Oder	10,000 km²	yes	developing
Venice Lagoon	550km ²	no	infancy
Gdansk	39,325km ²	yes	developing
Limfjord	7500km ²	no	infancy
Danube Delta-\	54km ²	yes	developing
Thau Lagoon	162km ²	yes	well developed



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Results of Lessons Learned Preliminary Findings

- 1. Most ICZM principles directly implemented
- 2. Some strategic management directives implemented
- 3. Some elements of the Systems Approach Framework were more useful than others for technical management
- 4. Most partners had adequate capacity for action
- 5. There were some limitations in the Systems Approach Framework.









"Most ICZM principles directly implemented"

- 1. holistic approach \checkmark
- 2. participatory approach \checkmark
- 3. consideration of natural processes \checkmark
- 4. locally specific \checkmark
- 5. long term perspective ×
- 6. involvement of relevant administrative bodies \checkmark
- 7. involved a range of policy and technical instruments
- 8. adaptive approaches \checkmark









Some Strategic Management Directives Implemented"

- 1. Ecosystem health (WFD, BWD, OSPAR, HELCOM)
- 2. Water resource management (WFD)
- 3. Pollution control & prevention (UWWTD/ IPPCD)
- 4. Nature conservation and habitat man
- 5. Natural hazard man
- 6. Spatial planning/ dev control
- 7. Marine spatial planning
- 8. Industry and human uses
- 9. Contingency planning
- 10. Environmental assessment
- 11. Strategic environmental assessment
- 12. Heritage
- 13. Coastal access
- **14.** Climate change strategies



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SIXTH FRAMEWORK

PROGRAMME



"Most Partners Had Adequate Capacity for Action"

Knowledge, skills and attitudes from academic disciplines and study sites

Capital, people, expertise, quantitative & qualitative data, communicati on tools, "permission" to participate



Partners learned a new approach and jointly developed new multidisciplinary skills to implement it

Cascade activities: Local study site meetings, SPICOSA E-News and website, academic courses, professional training activities, E Handbook and through SETNET (SPICOSA Education and Training Network) newsletters and website







Limitations

Constructive criticism focussed upon the need to:

- 1. involve more stakeholders
- 2. develop a common glossary early
- 3. use a pilot site
- 4. appraise data before issues identification
- 5. avoid use of EXTEND modelling in the first cycle.









Review Conclusions

- 1. Systems approaches have the potential to positively influence ICZM
- 2. Good implementation of ICZM principles; implementation of some strategic policies; good contribution towards local technical management activities
- 3. Results of modelling can be questionable
- 4. The process of raising awareness of roles and responsibilities of stakeholders, of identifying influencing factors and of gaining consensus on what the system "looks like" is valuable
- 5. Illustrate and communicate complex economic, social and ecological concepts on a single, easy to understand platform is also valuable
- 6. Time to embed new concepts.









Are We There Yet???

Reminder of SPICOSA Aim:

"<u>self-evolving</u>, holistic research approach and support tools for the assessment of policy options for sustainable management through a balanced consideration of the ecological, social and economic aspects of Coastal Zone Systems".







Exit strategy-objectives

Thus, the main goal of the SPICOSA legacy beyond the project lifetime is to

build a community of developers and users of the SAF Toolbox in support of science – policy integration based on the integrated assessment of coastal or marine systems.

The specific objectives are:

1. To use the local models in Study Site Applications (SSAs)

2. To incorporate the SAF approach into future science-policy project initiatives at the national and international level

3. To facilitate the long term development of academic and professional training activities using SPICOSA principles, including cascade to a wider audience and incorporation into continuing professional development programmes and academic curricula.

4. To lobby to achieve the inclusion of systems thinking into relevant EU policies



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Examples of tools

- Communication instruments:
- •SPICOSA website,
- •SAF Web Handbook,
- •SETNet network
- •partners networks,
- •SPICOSA Wiki



Education and training instruments:

•cascade workshops, academic papers, presentation at conferences

•SETNET e-network and website

•CoastLearn







Capitalisation channels

- A post SPICOSA SAF community could include:
- •SSAs teams
- •SPICOSA scientific coordinators
- •Developers and hosts of SPICOSA tools
- •Universities and training centres
- •Dissemination and media channels at partner, country and EU level (e.g. partners newsletters, EU "Science for Environmental Policy E-News",
- •Exiting platforms e.g. Venice Platform
- •Partnerships in general









So is the SAF Relevant to ICZM??? Yes! If you want it to continue, it can.

> This is a collaborative effort Now it's up to you!



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http://www.spicosa.eu/

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