

Discovery Modelling Mediation Deliberation: PASARELAS

Interface Tools for Multi-stakeholder Knowledge Partnerships for the Sustainable Management of Marine Resources and Coastal Zones

The PASARELAS Programme is a SSA (Specific Supporting Action) responding to INCODEV Topic A.2.2. "Reconciling Multiple Demands on Coastal Zones".

During 2005 to early 2007, PASARELAS has accompanied a group of INCODEV 6th FP research projects [CENSOR, INCOFISH, ECOST, ECOMANAGE] on coastal and marine fisheries resources with the aim of maximising research impact through the development of stakeholder dialogue "interfaces" between science and society.

Documentation: see the website:
<http://www.c3ed.uvsq.fr/pasarelas>

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Some High Points of PASARELAS

The Multi-Stakeholder Decision-Process Model

Coastal zone management is a domain of high scientific complexity, of economic risks and societal conflicts.

- High stakes decisions must often be taken with some urgency (or else they will occur by default).
- Expert evaluation (such as CBA, scientifically-based safety standards, risk assessments) is insufficient for public and private decisionmaking of issues involving high risk.
- In such circumstances, decision quality

Assurance may be sought through allying expertise to Stakeholder Negotiation.

- Prospects for socially satisfactory choices may be explored through bringing stakeholder perspectives into constructive dialogue with each other, in order to search for common ground.
- Consultative Process design is critical.
- Procedures of knowledge sharing, deliberation and stakeholder negotiation need to be developed that are adapted to the wide range of social actors involved.

Experimentation with new Multimedia Techniques

The PASARELAS partners have explored the use of multi-stakeholder participatory approaches together with multimedia information and visualisation technologies for *Building Knowledge Partnerships for Sustainable Development*. Learning about environmental governance challenges is achieved by participation in procedures (real or simulated) of selection and deployment of indicator systems (e.g., computer supported visualisation of scenarios and territories, and multi-criteria evaluation of alternative scenarios for land use, for ecosystem protection and management, for fisheries regulation and marketing, etc.). The multimedia tools and participation processes are demonstrated through exploitation of data, models and institutional knowledge from ongoing INCODEV research projects, engaging policy authorities, territorial administrations, higher education, private sector interests (e.g., fisheries, tourism, coastal zone agriculture), with outreach perspectives to civil society in its various forms. Documentation of the PASARELAS activities has been based on Internet technologies, supplemented by CDrom, printed documents, and popular media (posters, video presentations, etc.).

Teaching and Training

The 2nd PASARELAS Symposium held in Dakar (Sénégal) in March 2006, which brought together nearly 100 persons, was a privileged opportunity for collaboration between European and West-African researchers, policymakers and university teachers in the development of detailed proposals for a multi-disciplinary Masters programme SIGMA (Sciences, Ingénierie, Gouvernance et Métiers pour la Gestion Intégrée des Zones littorales et Côtières Ouest Africaines). For further information:

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Deliberation Support Tools and Social Multi-Criteria Evaluation

The complexity of coastal socio-ecosystems requires integrated management approaches. This need has been acknowledged in several European and international agreements and regulations, within the umbrella concept of Integrated Coastal Zone Management (ICZM). Among other approaches, the PASARELAS partners have reviewed and experimented with multi-stakeholder multi-criteria evaluation tools and methods (e.g. social multi-criteria evaluation, spatial decision support systems). In a Round Table at the 4th PASARELAS Symposium held in Venice in mid-March 2007, it was noted that the adoption of such methods and tools by potential end users (e.g., competent coastal administrations) is positively affected by several factors including: willingness for transparency in decision making; availability of financial resources.



The INCODEV projects accompanied by PASARELAS:

- ECOST (Ecosystems, Societies, Consilience, Precautionary principle, Development of an assessment method of the societal cost for best fishing practices and efficient public policies). Information: Pierre Failler, University of Portsmouth, UK, pierre.failler@port.ac.uk
- ECOManage (Integrated Ecological Coastal Zone Management System). Coordinator: Professor Enrico Feoli (University of Trieste, email: feoli@units.it). Chilean contact: Victor Marin, Universidad de Chile, vmarin@antar.sciencias.uchile.cl
- INCOFISH (Integrating Multiple Demands on Coastal Zones with Emphasis on Aquatic Ecosystems and Fisheries). Contact: Silvia Opitz sopitz@ifm.geomar.de
- CENSOR (Climate variability and El Nino Southern Oscillation:— Implications for natural coastal resources and management). Contact: Prof. Dr. Matthias Wolff, Centre for Tropical Marine Ecology, ZMT, Bremen (Germany). mwolff@zmt-bremen.de.

es and skills within the administration; availability of professional mediators (of knowledge) and facilitators (of public participation); effective communication means; strong motivation of competent authorities.

It has also been shown that multimedia techniques can be used effectively to support the definition of ICZM challenges, options and criteria for decisions with a wide variety of stakeholders, not limited by formal education.

- For example, in the M'bour district of the Senegal coastal zone, researchers collaborated with local fishing community and tourism operators to explore alternatives for reducing conflict around the beach areas of the town centre used for fisheries landing and for tourism. For further information contact: **Dr. Alassane Samba**, Scientific Programme Director "Bilan Prospectif", email: coordination@bilan-prospectif.org.
- With the help of the **PASARELAS** partnership, the **CENSOR** project partners intend to apply modern tools for multi-actor multi-criteria assessment and to use participatory techniques to elaborate jointly with all relevant stakeholders of the region a management plan for Sechura Bay in the context of integrated coastal zone management. Sechura Bay is the largest coastal bay of Peru, where several thousands of fishermen operate either as regular fishermen targeting fish or as diving fishermen targeting invertebrates. In an ICZM perspective, the main challenge is to find a way to manage the scallop resource (*Argopecten purpuratus*) in Sechura bay and on the Isla Lobos de Tierra in a way that the stock maintains its structure and function and fitness and allows for a sustainable and optimum harvest without affecting the functionality of the ecosystem and which contributes to the socio-economic development of the region.

For further information:

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Spin-offs towards new research cooperation on ICZM

The networking and methodological experiments of PASARELAS have already had an influence on research design for new projects, e.g., the EC funded Integrated Project SPICOSA (Science and Policy Integration for Coastal Systems Assessment) that has started in early 2007 and whose first science/society interface methodology workshop took place in Venice during March 2007 in tandem with the 4th PASARELAS Symposium. During this meeting, it was noted that the international agenda produced by Johannesburg submit indicates that all possible support should be given to help the development of Integrated Coastal Zone Management in Southern Countries. It is the responsibility of the European Union to develop a strategic agenda for that and to mobilize all possible financial and cooperative frameworks to facilitate its implementation. Partners of on going projects such as SPICOSA, ECOST, CENSOR have agreed at the 4th PASARELAS Symposium that they are willing to contribute with their expertise to identify key issues and preferable means of action. These recommendations should be reflected in the forthcoming calls of programmes such as the 7th FP or Eurpaid actions.



For further information on the ICZM Integrated Project SPICOSA:

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