From four “hotspot” lagoons to pan-European lagoons management: Lessons learnt so far from the FP7 LAGOONS project

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Introduction: The FP7-funded LAGOONS project comprises four case study lagoons with a wide and balanced geographical distribution (Fig. 1) and different characteristics (http://lagoons.web.ua.pt/). The selected lagoons are:
• Ria de Aveiro Lagoon in Atlantic Ocean (Portugal);
• Mar Menor in the Mediterranean Sea (Spain);
• Vistula Lagoon in the Baltic Sea (Poland/Russia);
• Tylygulskyi Lagoon in Black Sea (Ukraine).

Methods: The oral presentation will discuss the methodological concept and present some of the central results obtained so far of the LAGOONS project.

Results: The initial knowledge and knowledge gaps analysis and the focus groups interviews conducted from the onset of the project identified a set of common needs across the four case study lagoons. This resulted in the following generic recommendations i) Improve the meteorological and/or eco-hydrological monitoring in the lagoons and/or in the respective catchment area; ii) Application of effective methods for environmental management, including its resilience and adaptability to human and natural stresses; iii) Increase the knowledge about the evolution of the lagoons as social-economic and ecological systems; iv) Application of mechanisms for active participation of stakeholders including “ordinary citizens”, in the decision-making process. All these recommendations where then embedded in the further research work which focused on creating a web-GIS information system; studies on ecotoxicological responses of key bio-indicators; mathematical modelling of lagoons and catchment areas; and analysis of ecosystems services. Another core activity was the participatory scenarios (based on citizen juries and stakeholder inputs) which information was translated into quantitative values for drainage basin and lagoon impact modeling for further discussions with stakeholders.

Discussion: This analysis highlights the importance of science-stakeholder and the policy-stakeholder interface in the present-future management of these coastal zones. A central aspect is how to enhance connectivity between research and policy-making, and how can such a bottom up case-study approach be useful and transferable to lagoons management at a pan-European level.

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