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Participatory tools and methodologies for valuing Marine and Coastal ES: A framework to support decision-making processes



CENSE – Center for Environmental and Sustainability Research / Ecological economics and environmental management

Rita has a MSc in Environmental Engineering from the UNL. She is a second-year PhD student attending the doctoral program of Climate Change and Sustainable Development Policies, promoted by the UNL, UL and UTL with a participation of University of East Anglia.



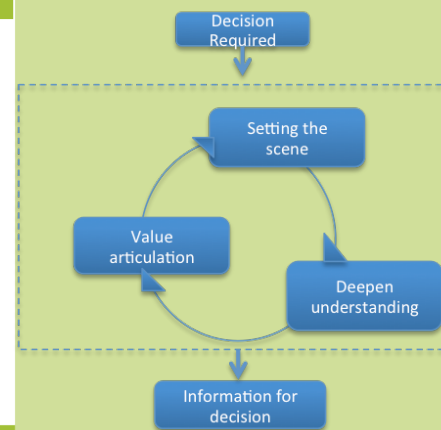
Objectives

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The main objective of this PhD research is the development of an integrated participatory framework for valuation of marine and coastal ecosystems services (ES). Due to recent policy initiatives and increasing attention given to the economic exploration of marine and coastal resources, these ecosystems are becoming highly exposed to anthropogenic pressures. The specificities of marine and coastal ecosystems, their complexity and most of the times the inaccessibility of their goods and services becomes an obstacle to create awareness and recognition of the suite of benefits they provide. Portugal has a long tradition on coastal and maritime activities with an important weight in Portuguese economy, with this framework it is intend to support decision-making in this field fostering participation and integration of marine and coastal ES.

Methodology

The framework comprises three main stages (Fig.1) each one with different participatory tools (e.g. exploratory and in-depth interviews, workshops, etc.). The process starts by “setting the scene”, where institutional analysis and stakeholder involvement procedures are deployed. The second stage “deepen understanding” is where the impacts of policy and/or project proposals are determined. This involves the identification of affected ES, variations on flows of services and the associated ecological, social and economic values. The final stage “value articulation” fosters integration of knowledge as an input for policy and decision-making processes. The framework is based on a participatory approach that plays an important role addressing the problem of integration and articulation. The framework will be tested in a case study in Portugal, which is a suitable context for the development of new methodologies that could help in the sustainable management of marine and coastal ecosystems.



Expected Results

Fig.1 – Conceptual Framework.

This framework is expected to provide an improved methodology to support decision-making processes in marine and coastal ecosystems by allowing a more conscious and informed outcome.

The research will add communicative and informative features by advancing an approach that integrates deliberative methods for articulating the multiple values of ES affected by marine and coastal decisions.

The process will contribute to the sustainable management of natural resources within the integrated socioecological systems.

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