



MARINE ECOSYSTEMS KNOWLEDGE to SUPPORT an ECOSYSTEM-BASED MANAGEMENT APPROACH.



'The 'PEGASEAS' project was selected under the European cross-border cooperation programme INTERREG IV A France (Channel) – England, funded by the ERDF.'



Promoting Effective Governance of the Channel Ecosystem
Promouvoir une gouvernance efficace de l'écosystème de la Manche

The use of scientific knowledge within an ecosystem-based management framework (PANACHE project)

Evidence collection

to inform decision-making, may consist of ecological and/or socio-economic data (e.g. location of features or activities)

Evidence-based marine management cycle

a common framework for decision-making used by IFCA (Inshore Fisheries and Conservation Authorities)

Assessment of the ecological coherence of Marine Protected Areas (MPAs) networks

Several criteria: representivity, replication, adequacy, connectivity, level of protection and resilience

Approaches: an expert knowledge based method (scoring systems), a matrix/spreadsheet reporting method (species-habitat assessment), a GIS-based spatial analysis (spatial distributions)



Shellfish farming in the Golfe normand-breton (© Xavier Desmier / Les Champs photographiques)

Ecosystem services (ES)

the benefits people gain from ecosystems
(Millenium Ecosystem Assessment, 2005)

- 4 types of ES
- provisioning services
- regulating services
- cultural services
- supporting services

The VALMER project is implemented in 6 pilot sites which have different management contexts → **different issues to address** → **different methods to use and tools to develop.**

Knowledge required refers to

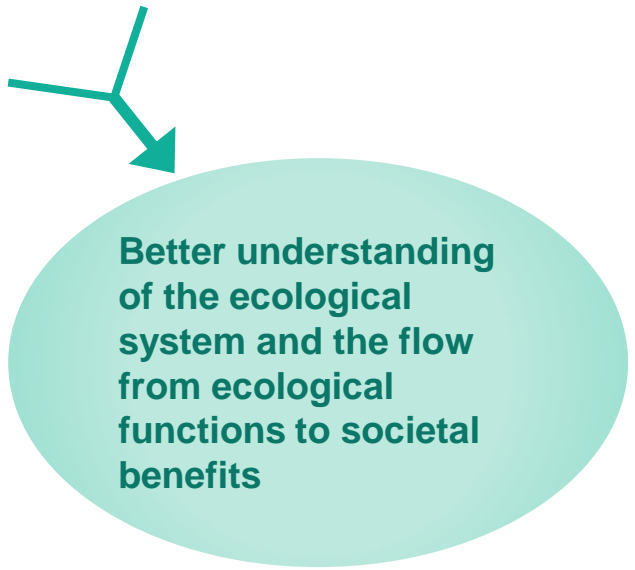
- biophysical parameters (e.g. kelp density)
- socioeconomic parameters (e.g. to what extent people are willing to protect sea grass beds)

Depends on ecosystem under study, type of ES assessed, assessment approach

Integration through different assessment methods

- mathematical models (e.g. kelp fields model)
- social sciences techniques (e.g. questionnaires)

Assessing ES has a crucial role in integrating knowledge
→ Need to further explore application and usefulness to management



Better understanding of the ecological system and the flow from ecological functions to societal benefits

LiCCo

- to understand how stakeholders and users of the Normandie coastal area might react to change by 2025 and 2050 → how their decisions might impact activities and local development
- implementation of strong sensitisation strategies towards the different stakeholders

VALMER

- to translate ecosystem services concepts into operational management
- to link uncertainty about the future to the current management considerations
- mobilisation of the knowledge acquired and tools developed (e.g. ecosystem services modelling) during the ecosystem services assessment with new ideas, perceptions, facts brought by stakeholders during workshops

→ Both projects stress the need to involve stakeholders to develop visions, integrate local knowledge, and ensure effective use of scenarios in management.

Involvement of stakeholders through, for example:

- a platform for marine governance (CAMIS);
- co-development of actions (CAMIS);
- scenario-building exercises (LiCCo, VALMER)
- create an environment that will facilitate ownership of decisions;
- link management concepts and decisions;
- share limitations and uncertainty of tools

It is essential to :

To learn more about:

CAMIS - <http://camis.arcmanche.eu/>

LiCCo - www.licco.eu/

PANACHE - <http://www.panache.eu.com/>

VALMER - www.valmer.eu