



Policy, Science and scientific symposium, 3-4 May 2010

Topic 2: Preserving life

Session 13: A new marine conservation approach based on ecosystem services identification and maintenance

Ecosystem services are the benefits provided by nature to ensure our well being and activities. In 2000 was launched by the United Nations a large study (The Millennium Ecosystem Assessment) to identify and assess the state of ecosystem services globally. Its conclusion reveals that 60% of global environmental services have been deteriorated or used unsustainably. This study has gathered more than 1,300 scientists around the world and provides a basis to justify the emergency of protecting and restoring biodiversity. Four main types of services were defined: support, regulating, supply and cultural services to develop a better knowledge on the interactions and dependences between nature and human beings.

In order to further advance the knowledge on French ecosystems, the French Ministry for Environment launched in 2008 a process of national evaluation of French ecosystems.

Marine environment provide essential ecosystem services. The support services represent natural processes like oxygen and biomass production, natural habitats and biodiversity. Oceans play also a key role in climate control as a heat reservoir, air quality control by sequestering gas emissions or water quality regulation. Marine habitats also provide many cultural services such as leisure fishing, tourism, sailing or species observation. Finally there are also supply services like fishery products, cosmetics and pharmaceuticals compounds, salt....

The evaluation of marine ecosystems services, including of coral reefs and mangroves have been subject to numerous studies in specific regions or sites. Recently, the European Commission along with other partners has commissioned a study entitled «The Economics of Ecosystems and Biodiversity» (TEEB). This study comes in line with the MEA and aims to explore the value of ecosystems and biodiversity in order to detail potential uses of these values and constitute an advocacy tool for conservation. Indeed the establishment of conservation measures based on the evaluation of ecosystem services is not always well translated by appropriate actions in governmental policies.

There is also a real need to explore ways to integrate the economic value of marine ecosystems in the economy.

The international community has recognized the need to integrate scientific knowledge on biodiversity, ecosystem services and human well –being associated into concrete and specific politics measures. The science/society “International Platform for Biodiversity and Ecosystem services” (IPBES) would provide a relevant and essential framework to respond to this purpose.

So we recommend:

- To identify and characterize the whole range of marine ecosystem services to further investigate the link between biodiversity functions and ecosystem services in the marine environment and explore how these are interconnected.
- To systematically take into account non-use values in ecosystem evaluation
- To integrate the preservation of ecosystem services for sustainable management of marine environment
- To promote the development of national versions of the Millennium Ecosystem Assessment
- To develop methods for the assessment of ecosystem services. These methods could be used for the purposes of marine conservation, in particular for the establishment of networks of marine protected areas
- To integrate the economic value of marine ecosystems in the economy and promote a sustainable financing of conservation.
- To promote the implementation of Payment for Ecosystem services (PES) programmes in coastal and marine areas as a new tool for marine conservation: by developing ways to charge services users, by developing payment systems that reach ecosystem managers, by establishing institutions to implement the mechanism and experiment this in a real world pilot projects, by developing further research about payment for ecosystem services.
- To promote the development marine ecosystem research and observation networks. These networks have to mutualize and combine scientists and ecosystem managers efforts to gather a better knowledge about ecosystems functionalities and existing methods for their survey and evaluation.
- To support the creation of the International Platform of Biodiversity and ecosystem services to afford regular and complete scientific information about ecological services and biodiversity status. The IPBES will support multidisciplinary and transnational studies, including models and scenarios about ecosystems evolution, and translate this emerging scientific knowledge into specific policy actions at the appropriate levels. The IPBES should represent “a common global voice” on biodiversity and ecosystems by developing communication actions.
- To take into account these recommendations during the CBD COP 10, to mobilize policy makers to preserve the good health of marine ecosystems and services associated.