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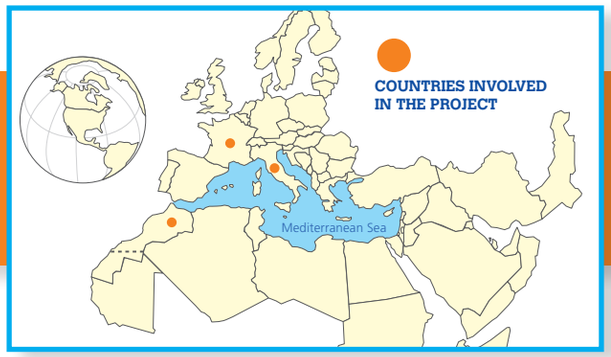

Climate change impacts on coastal areas in the Mediterranean

Coastal areas have a strategic role in meeting the needs and aspirations of current and future populations. Yet they have been witness to a progressive and occasionally irreversible degradation. To avoid further losses, an appropriate long term strategy must be developed

OBJECTIVE

Medcodyn aims to assess coastal ecosystems' vulnerability to climate and anthropogenic modifications and to explore adaptation measures.

The necessity of an integrated approach

Proper functioning of coastal lakes, wetlands, estuaries and lagoons is fundamental for water resources (groundwater recharge, surface waters), food production (maintenance of fisheries, bovine grazing and aquaculture) and biodiversity. An integrated approach is required to develop long term strategies which overcome present problems in coastal management, in particular:

- insufficient information about their ecological state ;
- insufficient collaboration between scientific, administrative and policy levels.

A focus on three ecosystems

In the present project, researchers from Italy, France and Morocco are working closely together over a 24 months period to develop instruments to facilitate the long term management of coastal aquatic ecosystems, focusing on three important coastal ecosystems in Italy, France and Morocco.

The project has begun with the construction of a common information database which was completed following an intensive exchange between project researchers in Italy, France and Morocco: local workshops were performed in Sabaudia (Italy) and Mehdia (Morocco) with the active participation of stakeholders operators and researchers. Scientists will then utilise models and indicators developed in recent research to assess the vulnerability of the studied ecosystems to climate change.

Adaptive measures will also be examined, evaluated, prioritised and integrated into a broad plan of action that takes advantage of expected changes in climate and ecosystem resource use. The resulting adaptation strategy will integrate the adaptation measures, each evaluated separately as well as together, according to their effectiveness to meet specific objectives of short and long term management of the quality and quantity of these resources/services.

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Medcodyn reseachers taking samples in Sidi Boughaba (Morocco), 2009.

THE PARTNERS IN THE PROJECT Climate change impacts in transitional water systems in the Mediterranean (Medcodyn) - 2008/2011:
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