

Assessing the Value of Two Coastal Wetlands in Turkey

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Abstract

Sustainable development of a coastal zone requires information on the potential for economic development and on the environmental quality of that area. Cendrero & Fisher (1998) developed a rapid assessment method to quantify the potential for economic development and for the environmental quality. The method is based on the identification of a series of characteristic parameters used to describe different environmental and economic components. The environmental components involve aspects of nature like for example: air, water, terrestrial biota, geological and topographic features. The economic parameters include antropogenic aspects such as population density, land-use, land-ownership, public recreation facilities, building type and density. The value for the total area is found as a weighted average of the values for all parameters.

As part of the MEDCOAST summer course on ICZM, this method was applied to assess the environmental quality of two coastal wetlands in southwestern Turkey with entirely different environmental and economic characteristics: Dalyan and Dalaman. For each of the two areas, values for the environmental quality and the economic development potential have been computed in a semi-quantitative way. Values for both areas were plotted in a so called "conservation value/development potential" diagram. The method can be applied in two ways: to assess the base line situation and to compare potential future development strategies. The present position of Dalyan and Dalaman areas in this diagram gives the base line situation and reflects the differences in coastal planning and management. With help of the diagram options to increase environmental quality and improve sustainability in the areas can also be evaluated provisionally, by comparing the position for potential future development strategies.

The paper focuses on the first application and schematically illustrates the second application. Recommendations for improvements of the method are given. A GIS based software package was developed to facilitate the computation of the environmental quality. (COZMIS-VALOR)