



Project CARIPES: Quantification of ecosystem services provided by marine protected areas in the Caribbean with a view to their payment

By assessing the value of ecosystem services generated by some specific marine protected areas (MPAs), project CARIPES aims to increase fishermen' support to MPAs and to actively involve them in the conservation efforts and in the sustainable use of the marine resources of Caribbean MPAs. The assessment can be used to develop a system of payment for ecosystem services and establish a transfer of money from the users towards the fishermen.



CARIPES project

This European project covers three case studies: French, Dutch and British MPA implementation and management and three small-scale fishery systems. It involves different cultures and policy development for one similar objective: marine environment conservation and resources management in tropical Caribbean areas.



Economical assessment of MPAs can give an idea of the value attributed in part to ecosystem services. The creation of a marine reserve in the north-west of Martinique, located in the Prêcheur, has led to an economic valuation of marine and coastal ecosystems. The total economic value (TEV) has been estimated at about 58 million Euros annually, almost 12 million Euros by km². This value stands for the sum of values stemming from: i) direct uses (fishing, diving, beach leisure, etc.) for almost 3 million Euros; ii) indirect uses originating from ecological services (water treatment and nutrient cycling, biomass productivity, carbon sequestration) for 200,000 Euros; and iii) non-uses associated with the existence and bequest to the next generation of the natural capital without any consideration of use for about 55 million Euros. Note that the TEV may even be higher as the value of adaptation function of the coastal and marine ecosystems has not yet been included. The creation of the marine reserve should lead to an increase of this value through an enhancement of ecological services of ecosystems and the non-extractive uses such as tourism and marine leisure.

Similar evaluation will be done in Saba and the British Virgin Islands (BVI), and results will be used to generate new mechanisms of payment for ecosystem services and a better acceptance of MPA projects by fishermen.

Project goals

The principal objective of the CARIPES project is to actively involve coastal fishermen in the conservation efforts and in the sustainable use of fishery resources in the MPAs of the Caribbean. The establishment of a scheme of payment for ecosystem services within a marine protected area project in Martinique and in two MPAs in Saba and the British Virgin Islands aims to

promote such efforts by establishing a fund transfer from the users towards the fishermen. Beyond the financial aspects, the implementation of such a process intends to change the image related to the world of fisheries: rather than being considered as a destructive force of the marine environment, it would be seen as the guardian of its good health. The project is developing avenues in this direction so that the traditional knowledge of the fishermen is valued. It may also mark the stages for the implementation of payments for ecosystem services in MPAs in coastal areas in the Caribbean and in other parts of the world.



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Specific objectives

- To find a good governance of areas/resources where the objectives of conservation and sustainable use of fishery resources converge
- To use the knowledge of the fishermen to better answer the consequences of the global changes and potentially improve the resilience of ecosystems in MPAs
- To improve knowledge relating to ecosystem services produced within MPAs of the Caribbean area
- To strengthen regional co-operation in terms of research and management of MPAs
- To develop payment mechanisms for ecosystem services
- To increase the number of MPAs and to improve the effectiveness of those already in place by the development of an effective mechanism for financing conservation actions.



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