

A project to develop a global database on coral reefs, to be called ReefBase, was initiated at ICLARM in November 1993. The Commission of the European Communities (CEC) has provided funding for the first two years, and the database will be developed in collaboration with the World Conservation Monitoring Centre in Cambridge, UK, as well as other national, regional and international institutions.

Coral reefs, the marine equivalents of tropical rain forests, are under threat in many parts of the world as a result of habitat degradation, overexploitation and, possibly, global climate change. Although fragile, coral reefs are highly productive and can support high levels of sustained fishing if the fishing is sensibly regulated. If they are in good condition, they also have great value as tourist attractions. In many parts of the world these economic benefits are being eroded by siltation from poor land management, nutrient enrichment from sewage, other forms of pollution, destructive fishing practices, and intensive use by tourists. However, the magnitudes of these impacts are largely undetermined and undocumented. Basic questions such as 'what is the total area of coral reefs in the world?' and 'what is the contribution of reefs to the world's fisheries?' are still unanswered.

As currently envisaged, ReefBase users, through a global map on their computer screen, will be able to focus in on any country, reef system or individual reef to obtain details of reef area, species composition, coral cover, catch rates and composition of reef fish and invertebrates, recreation and other forms of resource use, human impacts, management efforts and indigenous knowledge. Current discussions among reef scientists on common methodologies and terminology are being used as a starting point for designing the data entry fields.

The preliminary focus will be on obtaining estimates for reef areas, which in many cases will necessitate literature searches and correspondence with a wide range of individuals. Initial figures may well be approximate but will be replaced with more reliable data as the project progresses. Information on other aspects will initially be entered on a more *ad hoc* basis, the emphasis being on linking with other data-collection programs, rather than collecting and inputting raw

in reef health at national and global levels, thus providing conservation organizations, governments and the media with the statistics and information that are needed to implement policy changes. ReefBase will also be useful in identifying future research priorities and could serve as a framework for the development of analytical tools. This has been done on a small scale in Australia, where data compiled for the Great Barrier Reef are being used to identify patterns of ecology and structure and as a management tool.

ReefBase will draw on the experience gained from FishBase, a large database on fish biology, also developed at ICLARM with EC funding. It will link with this database as well as national and regional databases.

In order to accomplish these objectives, ICLARM will develop a global network of collaborating scientists and institutions. In developing countries, where coral reefs are most extensive and most threatened, means will also be sought to provide technical assistance in data acquisition and to enable developing-country scientists to develop their skills fully by further training or appropriate linkages with advanced research laboratories and universities. It should be possible for researchers who can obtain appropriate funding, to work on particular areas of ReefBase, benefiting from the global context that the database will provide and augmenting and contributing themselves to the information that is stored, an activity for which they will be fully credited.

The first version of ReefBase will be distributed to all collaborators in 1996.

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a Global Database of Coral Reef Systems and Their Resources

data. Each data entry will be flagged according to its reliability, and will be referenced and acknowledged.

ReefBase will provide data from which it should be possible to quantify changes