



INTERNATIONAL WATERS RESULTS NOTES

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Protection of Marine Ecosystems of the Red Sea Coast

GEF ID#: 394, PIMS ID#: 72

Project Status: Completed



Photo by Galen R. Frysingier

Key results:

1. A literature review, field surveys, and remote sensors were used to establish baseline data on the Yemeni Red Sea Coast.
2. Environmental information collection training was provided to staff of relevant agencies.
3. Training in and implementation of public marine environmental awareness was successfully enacted.

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PROJECT OBJECTIVE

The Red Sea coast of the Republic of Yemen is of international importance because of the richness of its marine ecosystem and its high biological diversity. The Red Sea fishery is important to Yemen's economy as a significant employer, providing jobs on medium and large boats engaged in offshore fishing for pelagic fish and shrimps, and small boats engaged in the reef-based artisanal fishery. Fish also provide an important source of protein locally and nationally. Yemen's Red Sea marine environment and fishery are threatened by oil pollution, development and unsustainable fishing.

The project's main objective was to protect the marine ecosystems of the Yemen Red Sea coast, including coral reefs and other critical habitats, which are important to fisheries and to maintaining high biodiversity.

RESULTS: PROCESS

INDICATOR #1: Resource inventory and assessment completed. [*Target: Baseline data developed on the Red Sea coastal and marine ecosystems key species groups, human uses and consequential environmental pressures.*]

Sana'a University completed an impressive literature review, as well as undertaking a preliminary reconnaissance survey of coastal habitats to identify environmental hot-spots and to collect tissue and sediment samples for analysis of contaminants. The literature survey and rapid reconnaissance work provided the basis for planning the succeeding habitat survey work. Field surveys were undertaken on at least 57 sites, with particular emphasis on coral reefs. A database was developed for the information procured in the field surveys as well as through remote-sensed sources. This database was used to develop a GIS package capable of producing high-resolution maps.

INDICATOR #2: National capacity for marine environmental management developed. [*Target: Training provided in environmental information collection and interpretation; environmental impact assessment (EIA); and public awareness enhancement.*]

While no training in EIA was given, information collection training was successfully provided to eighteen staff of relevant agencies in a range of skills through a combination of on-the-job skills transfer, formal workshops and overseas courses and fellowships. Skills taught included tropical coastal management, data collection and analysis, computer application, instrumentation, diving, and underwater photography.

Training needs in public awareness were assessed by a consultant in conjunction with eight national government and non-governmental organisations. A workshop was held to provide participants with public awareness information and to improve their skills to disseminate such information. Thirty participants attended including teachers, other government workers and journalists. The media were enlisted to raise environmental awareness, especially along the Red Sea coast. Leaflets, posters, newsletters, newspaper and radio articles were successfully utilised. Specific programmes were designed for raising public awareness through secondary schools and also through radio media. Public participation events included a beach sweep at Al Khawkhah and the rehabilitation of a mangrove forest near Hodeidah. A video was also prepared on marine environmental matters along the Red Sea coast.

INDICATOR #3: Enhanced regional cooperation for sustainable management of the Red Sea environment. [*Target: Establishment of a regional coordination element within the Programme for the Environment of the Red Sea and the Gulf of Aden (PERSGA) with assistance from UNEP, and active dialogue with other ongoing programs in the Red Sea region.*]

The project coordinated very closely with the GEF WB-UNDP-UNEP Red Sea Strategic Action Programme project being implemented by PERSGA, resulting in increased exposure of Yemeni scientists to regional environmental and fisheries initiatives. The project and PERSGA successfully collaborated in a regional workshop on environmental surveying and monitoring attended by 21 specialists from six PERSGA member states. PERSGA assisted in arranging a Saudi dive instructor who successfully trained six Yemenis in SCUBA diving.

KEY LESSONS LEARNED

- 1) Proper coordination and giving all concerned parties the chance to contribute towards achieving the aims of the project throughout the entire executing period will greatly benefit a project.
- 2) If a greater portion of the budget had been given to national institutions rather than international subcontractors, the project may have lasted longer and the counterparts may have had the opportunity for increased education and qualification. International experts could be recruited when needed.
- 3) Where a biodiversity resource of international importance such as the Red Sea marine ecosystem is also an economic resource of local and national importance, the relationship between the two and threats to them must be clearly understood through a sound process of problem identification.
- 4) Though there are costs associated with substantial modifications to project design, these should not be avoided when necessary.

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