Marine and coastal protected areas within the Gulf of Aqaba: an example of balance between conservation and development within the Arab Republic of Egypt

The Gulf of Aqaba Protectorates declared periodically since 1983 have become established as a driving and regulatory force for all economic and tourism development activities in Southern Sinai. Through a gradual process that has successfully informed key decision makers and line ministries within the Government of Egypt, the Egyptian Environmental Affairs Agency (EEAA) has managed to implant the concept of resource conservation, protectorates management and intergenerational equity as key elements of national policy. This short note describes mechanisms that have permitted the government to adopt this visionary position given the immediate economic and planning realities presented to any state with a population of over sixty million and clearly divergent priorities to accommodate their needs.

The Gulf of Aqaba Protectorates consist of a network of three distinct units linked by protected coastlines thereby creating a large Marine Protected Area (MPA) on the Gulf of Aqaba. These protected areas are stretching from Taba (international border with Israel) to the Ras Mohammed (southern extremity of the Sinai peninsula) covering approximately 260 km of coastline and extending North in the Gulf of Suez for about 30 km.

The declaration of the Ras Mohammed Marine Protected Area in 1983 marked the beginning of a process that was to eventually establish management over all coastal marine environments on the Gulf of Aqaba and eventually serve as a model for Egypt's Protectorates policy for the 21st century. The Ras Mohammed Marine Protected Area existed as a paper park until 1988 when the Govern-

ment of Egypt entrusted its Egyptian Environmental Affairs Agency with the task of developing and managing this internationally significant coral reef resource in line with the Governments tourism development strategies. With Technical Assistance from the Commission of the European Union a programme meeting the needs of the Government was implemented in 1989. Immediate actions included expansion of existing boundaries from 97 km² to 233 km² and designation as a National Park (Category II). IUCN Category II management objectives together with the prestige value of developing Egypt's first national park were key elements leading to the selection of this Category. The Ras Mohammed National Park Development Project successfully implemented management measures that established Egypt's first National Park, regulated tourism development in adjacent areas, regulated artisanal fisheries, and initiated a process whereby stakeholders were provided partnership opportunities. The success of the Ras Mohammed Project lay in the conscious decision to identify and implement management objectives with only a rudimentary knowledge of the nature of the resources being managed, and to adjust management as parallel monitoring programmes identified immediate resource management and conservation needs.

The success of the Ras Mohammed project led to the declaration of two additional Protectorates on the Gulf of Aqaba in 1992. The Nabq and Abu Galum Managed Resource Protected Areas (Category VI) were linked by the Dahab protected coastline. Together these areas established the Ras Mohammed National Park Sector consisting of

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1651 km² of marine and terrestrial habitats and 43% of Egypt's littoral on the Gulf of Aqaba (Table 1).

Evaluation of EEAA management actions on the Gulf of Aqaba coupled to strong support from investors and stakeholders prompted the government to establish the South Sinai Protectorates Management Sector through the addition of the remainder of Egypt's littoral on the Gulf of Aqaba to the Abu Galum Managed Resource Protected Area, the expansion of the St. Katherine Protectorate and the Declaration of the Taba Natural Monument in 1998.

The coastal part of the Sector (Table 1) consists of 5486 km² of linked marine and terrestrial protectorates. All shorelines from the highest high water mark to the 500m isobath on the Gulf of Aqaba and approximately 30km of marine and terrestrial areas on the Gulf of Suez north of the Ras Mohammed Peninsula are protected. This provides the EEAA with executive regulatory and management authority ensuring support of economic development activities in the South Sinai Governorate (Administrative "Province").

Management Objectives

Management objectives favouring the development of the South Sinai Protectorates are directed to respond to, and mitigate, the consequences of rapid development of a tourism based economy in Southern Sinai.

Proximity of the South Sinai peninsula to the European tourism markets coupled to its wealth of marine and terrestrial natural resources, outstanding landscapes, a rich cultural heritage and coral reefs of international significance have acted as a catalyst and promoted investment in the region. Since 1988 tourism capacity on the Gulf of Aqaba has expanded from 1030 beds to over 20,000 beds. Expansion of bed capacity is obviously accompanied by expansion of tourism support infrastructures and tourism service operators. Resident populations are increasing through migration from heavily populated urban centers in Egypt and problems associated to frontier territories are now evident in South Sinai. The task of the EEAA is to conserve natural resources, regulate massive development projects and establish partnerships with stakeholders and investors often unaware of the close linkages between resource conservation and the long term value of their investment.

Legislation

Law 102 of 1983 also known as the Protectorates Law provides the EEAA with a strong legislative tool to administer Egypt's protectorates. The

Table 1.

Name	National Category	IUCN Category	Declaration Date	AreaLand (km²)	AreaSea (km²)	Fishing Restrictions	Length Coastline
Ras Mohammed	National Park	II	1983	133	327	A: Closed S: Offshore	56
Tiran- Senafir	National Park	II	1983/1992	100	271	A: Closed S: Closed	n.a
Sharm-el Sheikh	Protected Coastline	_	1992	_	7 5	A: Closed S: Offshore	15
Nabq	MRPA	VI and IB	1992	465	122	A: 60% closed S: Offshore	47
Abu Galum	MRPA	VI and IB	1992	337	121	A: Open S: Offshore	25
Taba Coast	Protected Coastline	_	1996	-	735	A: Open S: Offshore	147
Taba	Natural Monument		III and IB	1998	2800	-	_
Total				3835	1651		290

Note: A: Artisanal Bedouin Fisheries. S: Sport fishing. Offshore: Outside protected area boundary and not closer than 500m from reef crest.

Law consisting of eleven articles and accompanying Decrees provides for all management and administrative requirements. It provides the EEAA with a mechanism to regulate and coordinate the actions of all other administrative authorities when these are likely to endanger the value and integrity of natural resources in any declared protectorate. The Law specifically prohibits any action that may lead to the extermination or damage or alteration of any organism or system or formation considered as a habitat for the living terrestrial and marine resources of the protectorate. The Law also forbids any activities, actions or experiments in areas adjacent to protected areas

that would affect their environment or processes without the express permission of the Nature Conservation Sector of the EEAA.

The Law stipulates that the EEAA must initiate monitoring activities essential to Protectorates management and that the purpose and objectives of establishing Protectorates should be clear to the public. The legislation permits the EEAA to set fees or other charges it deems adequate according to the level of service provided. Entrance fees are paid into the Environment Fund administered by the EEAA and are made available to the Nature Conservation Sector on the basis of agreed annual budgets.