

Tourism in the Egyptian Red Sea Area: A Responsible Development Approach

by
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Egypt has always been a world-renowned tourism destination of antiquity. A government policy of product diversification attempts to disperse tourists more evenly in the country. The Egyptian Red Sea coast is therefore targeted as a new tourism development zone. The author identifies the new development patterns in the Egyptian Red Sea area and discusses the potential tourism impact on the coastal environment. It is recommended that a responsible development approach be adopted for coastal and marine tourism in the Egyptian Red Sea area.

Tourism development became one of the modern economic development priorities in Egypt in the early 1960s. The development experienced steady growth in the past and was only interrupted by regional wars and political upheavals. Tourism earnings from 1960 to 1966 were doubled from \$63 million to \$122 million before the 1967 war.¹ The role of tourism was again emphasized during the economic reorganization of the 1970s after President Sadat came to power. Tourist arrivals increased from 541,000 in 1972 to 1,423,000 in 1982, showing an average annual growth rate of 11.6 percent during this period.²

However, an exceptional growth of Egyptian tourism took place in late 1980s after a temporary slowdown due to international terrorism activities in the region and riots in Cairo. The turnaround year of 1987 saw a dramatic increase of tourist arrivals of 50 percent to 1.75 million, compared to those of the previous year. The 2 million mark was reached in 1988, and tourist arrivals continued to increase rapidly to the total number of 2.5 million in 1989.³ This momentum was only interrupted by the Gulf Crisis in the summer of 1990 and the escalated Islamic fundamentalist violence in 1993.

From destination development standpoint, Egypt has been a world-renowned cultural and historic destination ever since Herodotus visited the country in the fifth century B.C. Antiquities concentrated along the Nile Valley have been the main attractions for international tourists.

However, a policy of diversifying tourist attractions was formulated by the Egyptian government in the first Five Year Plan in 1982. The underlying philosophy of this diversification policy is to develop more different types of tourism attractions to accommodate ever-increasing international tourist demand and to reduce the capacity pressure on the historic sites along the Nile Valley. New tourist attractions need to be spread geographically throughout the country. This policy of attraction diversification targets the development of the sunny climate and splendid coastlines of the Mediterranean, the Red Sea, and the Sinai Peninsula to make the country appeal to a much broader international tourism market. As a result, new tourism developments were initiated in the Red Sea area.

New Patterns of Development Are Evident

Previous tourism development along the Egyptian Red Sea coast was basically concentrated on the Hurghada and Safaga areas. Fifteen tourist lodging facilities with 1,820 rooms were reported in the Red Sea area by July, 1989.⁴ The Hurghada area witnessed a rapid development of tourism village accommodations. Many of these lodging facilities are low quality and poorly designed, such as tents and pre-fabricated huts.

In late 1989, a U.S. consulting firm, Arthur D. Little, completed a priority action plan for the Egyptian government as part of product diversification strategy. In this plan, the west coast of the Red Sea is divided into four development zones: Hurghada, Sahel Hasheesh, Ras Aub Some, and Safaga. It is estimated that the Red Sea development zones need 9,000 additional hotel rooms for future development.⁵

The involvement of multinational hotel corporations in the Red Sea area was not extensive in the past. The Sheraton Hotel built in Hurghada in the 1960s had remained vacant until late 1978, after the signing of the peace treaty between Egypt and Israel. Recently, Hilton International has planned three resort properties in the Red Sea area and the debut of the 200-room Hurghada Hilton is set in 1994.⁶ Some other multinational hotel corporations have also planned similar development in this area.⁷

It is clear that the promotion of the diversification policy will inevitably spur a rapid development along the little publicized Red Sea coast and transform the area into a popular tourism destination. Will the large-scale development and mass influx of tourists create a negative impact on the delicate coastal and marine ecology of the Red Sea? How can the destination pursue a balanced and responsible development strategy in which the economic and cultural benefits are maximized, and social and environmental costs are minimized? These questions deserve serious considerations on the part of destination planners and developers.

Tourism Influences the Environment

Tourism is an industry that places a heavy demand on certain environmental attributes. Tourism development and environment management can be in a symbiotic relationship in the destination areas if both are planned and controlled properly.⁸ The relationship of tourism and physical environment was comprehensively examined by Cohen and Pigram.⁹ Their examination of the effects of tourism on elements of the natural environment has demonstrated both positive and negative impacts. They purported that the growth of tourism leads inevitably to modification of the physical environment.

Worldwide, the coastal and marine environment has been a popular tourist attraction for centuries. Yet the delicate and complex physical and biological features of the coastal and marine system will not allow blind development. The need for a good understanding of the coastal and marine ecosystem is essential to an environmentally and economically sound tourism development. Poor design, improper site location, and inadequate resource management can damage the coastal environment and eventually destroy the tourism industry.

A review of research literature reveals this important fact in destination development. The impact of tourism on coastal ecology was recognized by Boote in 1967 in his study of the coastal geological composition, relief of the coastline, and types of tourist activity. He concluded that visitor and development activities have a direct impact on dune erosion, pollution, and destruction of flora and fauna.¹⁰

Harrison and Frampton reported that the plan for dredging and filling to raise the West Viti Island in Fiji for resort development would have an impact on the mangrove forest reserve and offshore lagoons. This massive dredge-and-fill plan was proposed to protect the new resort from inundation from storms and possible sea-level rise from global warming.¹¹ Meyer-Arendt documented the rise and fall of the Grand Isle resort on the Louisiana Gulf Coast due to the increased shoreline erosion by intensified development activities. The decrease in attractiveness supports the resort cycle concept and warns the destination's attempt to "fix" a naturally dynamic shoreline.¹²

Baines, when examining the sand-cay tourism in the South Pacific, analyzed human manipulation of physical resources for the purpose of tourism and identified direct damage of the fragile cays, vulnerable vegetation, limited water resources, and surrounding reefs.¹³ Functionally and aesthetically, the coastal resort destination of Algarve in Portugal was cited as a development failure for sacrificing environmental quality to the ever-rising demand for lodging accommodations.¹⁴ The lack of concern for landscape and the disrespect for the coastal natural resources were the causes for the anarchic growth in this popular coastal resort destination. Many new developments were described as aesthetically unpleasant, and even posing danger to the very security of buildings and people.

All these studies point to the universality of tourism impact on the coastal environment, marine life, and tourist experience. Without systematic planning measures and land use controls, coastal tourism development can incur conscious or unconscious destruction of the resources of its success. Since the Egyptian Red Sea Coast development is still in the early stage of development, attention must be devoted to a responsible development approach. The unique physical and biological attributes of the Red Sea area need to be examined and identified, and planning control measures need to be formulated to guide forthcoming large-scale development.

Red Sea Area Engenders Concerns

The Red Sea is a long, narrow body of water separating north-east Africa from the Arabian Peninsula. Egypt lies on the western shore to the north and enjoys a total shoreline of 1,386 km. The Red Sea is a very rich and varied environment and encompasses most of the interesting communities of tropical seas with highly spectacular fauna and flora. As the Egyptian Tourism Authority promotes: "There are many varieties of colored fish that lose their colors once taken out of water."¹⁵ The greatest variety of reefs can be found along the Egyptian coast. The coral reef north of the Gaftan Islands is known to be one of the five best diving spots in the world.¹⁶ Coral reefs along the Egyptian Red Sea coast are among the most attractive, most photographed in the world. A nascent ocean, the Red Sea is very salty and has the warmest deep waters in the world. These physical attributes represent an immense economic resource for tourism and recreational use.

In the past, this area served two primary international tourism markets. The attractive climate facilitated a year-round season for the Arab market, and the spectacular coastal and marine features drew young European divers who could not afford more expensive destinations and did not mind staying at tourist villages. Beyond these two markets, the Egyptian Red Sea coast is little known as a tourist destination in today's international market. With the effort to diversify tourist attractions, large-scale development will appeal to a much wider international market, and will consequently generate greater impacts on the coastal environment through increased tourist use. These impacts can be examined in three aspects: coastal construction, pollution problems, and resident and tourist behavior.

Coastal Construction Affects Shoreline

The development of a tourism infrastructure to provide accessibility and facilities for tourists has a direct impact on the coastal environment. Construction activities include overall construction of roads, lodging accommodations, transportation facilities, and residual effects from these activities, including bulldozer operations, and operational or careless oil spills. In the desert environment of the Red Sea area, extensive infilling to build seafront roads has been a common practice. This infilling can cause a subsequent washing out of the fine grained

material into the ocean, resulting in sedimentation, considered to be the major cause of destruction to many marine habitats throughout the tropics.¹⁷ The settling of large quantity of silt, sand, or other runoff materials onto the shore or seabed can damage many marine communities. Many coral reefs can hardly withstand the heavy loads of coarse grain material generated by coastal infilling. Massive damage of the fringing reef near Jiddah, Saudi Arabia, was caused by heavy sedimentation resulting from infilling activity.¹⁸

To mitigate the soil runoff problem associated with coastal construction, strip development close to the shoreline needs to be controlled. Major roads and service facilities should have a greater setback distance from the beachfront. Since there are large expanses of arid and unproductive land available, it seems possible to encourage construction away from the coastline. The problem of soil erosion can be thus reduced and the effect of sedimentation on corals can be minimized.

Pollution Problems Provide Threat

The pollution hazard poses a major threat to the beautiful physical amenities of the coastal environment. The Red Sea is almost completely enclosed and is highly susceptible to pollution since limited water exchange with the Indian Ocean considerably reduces the potential for the dispersion of pollutants. The major pollution input to the sea is of sewage, which, treated or untreated, is usually discharged to, or just below, the intertidal zone via pipelines, and is thus mostly a coastal problem.¹⁹ If sewage is not completely treated, algae can feed on the nutrients of the discharged waste. Increased algal growth stimulated by increased nutrient concentrations can be detrimental to coral reefs.

Death of corals caused by discharged sewage was carefully documented by Walker and Ormond in the Gulf of Agaba.²⁰ The death rate of the corals was found to be four to five times higher in the sewage polluted area than in a controlled area. Corals in the sewage polluted areas are under great stress because of the reduced light intensity caused by the blanket of algae. The increased number of tourists to the coastal resorts will produce more sewage, which, if improperly treated, can deplete the quality of the very amenities which attract the tourists in the first place, the clear water and spectacular reefs. That is why the residents on the island of Oahu in Hawaii demand that island resorts treat sewage four times before discharging it into the ocean.

In addition to sewage, oil spills and discharges from onshore and offshore oil fields and refineries in the Gulf of Suez area can be a potential threat to tourism and recreational activities along the Red Sea coast. As Dicks describes: "Many kilometers of coastline are severely oiled intertidally from spills from oil rigs and ships. Weathered oil pavements many centimeters thick blanket rocky promontories, sandy beaches, and, in a few locations, shallow patch

and fringing coral reefs.²¹ Tourism development and offshore oil exploitation have been on a collision course for years in Egypt.²² Even an Egyptian tourism minister often blames oil firms for Red Sea pollution.²³ A strong environmental act needs to be developed to guide onshore and offshore oil production, and to prevent further oil pollution in the Red Sea area.

Resident and Tourist Behavior Also Impact Ecology

Destination development and tourist activities have often combined to make major impacts on the coastal ecology. This impact can be studied by examining both resident and tourist behavior in the destination area. The direct impact caused by local residents is the effort to satisfy the mounting tourist demand for souvenirs. For example, the pufferfish in the Red Sea is a major predator of the Crown-of-Thorns Starfish and of the needle-spined sea urchin, both of which can cause extensive damage to corals. However, local residents make lampshades by inflating dried pufferfish for tourist souvenirs. The massive catch of the pufferfish leads to the abundance of sea urchins, which in turn damage the reefs near Hurghada.²⁴ There is also evidence that black coral is heavily collected by the local residents for making prayer beads and jewelry. Now black coral is practically extinct within diveable depths in many Red Sea locations.

The impact of tourists comes in many forms of uncontrolled use of coastal resources: extensive collection of corals, shells and other reef animals, spearfishing, damage to corals by boat anchors, destruction of coral vegetation by trampling and vehicles, and the proliferation of waste and garbage. In the Egyptian Red Sea coast, coral collection, spearfishing, and anchor damage are noticeable impacts.²⁵ Spearfishing is legally banned in Egypt, but some divers can be seen pursuing such activity. The practice of spearfishing can scare away fish species that are approachable to divers, thereby diminishing the diving experience.

The behavior of local residents and tourists can thus make direct and indirect impacts on the coastal and marine environment. Education and training in resource management is essential to making local residents aware of resource conservation. Only if local residents realize the vital importance of resource conservation and management can they act consciously to take good care of coastal tourist resources. Tour and recreation guidelines concerning resource conservation need to be explained to tourists at the destination area; for example, many Caribbean destinations now prohibit the touching of corals by divers. Tour operators need to enforce all government prohibitions regarding the conservation of coastal resources. Information signage should be built at each attraction to guide tourist behavior. With the cooperation of local residents and tourists, damage to the physical environment can be prevented.

An effort has been exerted by the Egyptian government to change Egypt's "antiquity" destination image to a destination of diversified

attractions. Large-scale development projects are initiated in the priority action plan for the Red Sea area, and major multinational lodging corporations are on the move to take on the development. The Egyptian Red Sea area has some world-famous coral communities and marine habitats which offer immense tourism and recreational values. It is also a very sensitive physical and biological system. Evidence has shown that direct and indirect impacts associated with coastal construction, pollution, and local resident and tourist activities can cause damage to marine habitats, changes of coastal community, and degradation of coral reefs.

At the advent of large-scale development, modification of the Egyptian Red Sea Coast is inevitable. However, a responsible development approach is suggested to guide development activities along the area. Strict planning measures and land use controls need to be implemented. Coastal zones with outstanding tourism and recreational values need to be designated as marine parks and reserves which offer complete protection to marine species and habitats.

It is highly recommended that the Egyptian Red Sea area be developed into a low-profile, ecotourism type of destination, one that needs to blend tourist facilities harmoniously into the local physical environment and cultural motif, and distinguishes itself from the highly commercialized Mediterranean and Caribbean regions. In this way, the purpose of the diversification policy can be realized and the Egyptian Red Sea area will be a tourist paradise for generations to come.

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