Tourism Development and the Environment on the Egyptian Red Sea Coast

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Tourism has become one of Egypt‘s main sources of income and has undergone rapid privatization and subsequent growth. This has resulted in numerous policy and implementation gaps including those in environmental policy. Egypt‘s natural resources are thus threatened by this unsustainable tourism growth. This study analyses the impact of the tourism privatization movement in Egypt on the distribution of environmental responsibility between the private and public sectors and the environmental consequences. Changes in the roles of the private and public sectors in tourism and other roles, priorities, and agendas that each stakeholder may have are considered in this thesis.

In order to gather information for this study, Egyptian laws and legislations pertaining to the areas of the environment, tourism and investment were examined. Secondary data from government sources about tourist numbers and characteristics, and about investment trends in Egypt were also obtained and examined. A series of interviews of key informants from the public sector, private sector, and NGOs were also conducted in the Egyptian capital city, Cairo, and on the Red Sea. Two Red Sea cities, Hurghada and El Gouna were visited and environmental initiatives in them were observed and made note of.

This study finds that the Egyptian private sector is more successful than the public sector at planning and managing environmental initiatives, and that Egypt‘s tourism pricing policy is a key influence on the level of environmental degradation. In terms of laws and regulations, it was found that Egypt has a sufficient number of environmental regulations and institutions; but that

the challenge lies in their functioning and efficiency, and that the government‘s environmental initiatives are largely symbolic and designed to attract foreign aid.

These findings suggest that Egypt should focus on improving the quality rather than increasing the quantity of tourism. Accordingly, the marketing competitive advantage should be the quality and uniqueness of the destination rather than its low price. In terms of private-public sector interactions, governmental institutions should assume a more active role in environmental protection and should employ experts and knowledgeable professionals as decision makers, while the private sector should be encouraged to undertake large-scale tourism projects. It is found that sustainable tourism cannot be achieved without the contribution and collaboration of both parties in tourism planning and development.

ـِـِخض

"مذ أ طج حذ "اسياحخ ِ ` أ ِ ظبس اليخ ً في ِظش بعدِب ِشِث"شاحل تخصيص غبسعة و قو ا ِخ ِغ ُ "

وبير. لذرغخت رّه في وجوث غشاد وثيرة في زن شيعا د "في رطجيم بشب في رز ش شيعات حاب ف ظخ ع ٍ لجيخ. بثبء

ع ٍرّه فمذ أ طج حذ ظِبدس "اسياحخ "اطجيعيخ في ِظش ِددح غخت ُ "زا أ ِ "ط ِ ` "اسياحخ اي غير حب ف ع "جيخ في هزا

لجحث يتمدس اعخ "تحليل تتأثير سياسة تخصيص "اسياحخ في ِ ظش زصيع ِغو ؤيخ لحجب ظ ع ٍ لجيخ ثي "مطب عي ` العام و

"خب ص ا عب ط رّه ع ٍ لجيخ "اطجيعيخ "سياحخ. أخ ف ي جا ب ر بثير رغثي أ داس " أويا د "خطط و ً ِ "مطب عي ` العام

" ا "خص.

رُ في هزا لجحث ج "غ "س اعخ ِعلو ِب د ع ` "اماني ن وزش شيعات ا "ظش يخ ا "تعلمخ ث مطاعات لجيئة و ا "غيحخ "

ا ثؤ بس. وَ زّ مر ُ ا "حظيِ ` ظِبدس ح ي ِيخ ع ٍ لجيانات حبطخ ث أعد اد "عيات "اغياح و إر ج ب د "أ ب ط ا ثؤ بس

"اغياحي في ِظش. "ع ٍرّه فمذ رُ ع ِ ً ع ِغخ ِ ` "لب د فه أش فل دب عي ` في قطاع ا "حي ِخ "مطب ع "ا خب ص "

ا "ج "ع رّه في مديخ امب ش ح قي ِطح لج شي ا "شث ب "زب "لذ رُ ع "ص يارة ِيذ أ ي خ "ذيح "الث دل خ " ِذيخ

ا "جُ ب اي ال غي ` ع ٍ ع ب ح ً لج شي ا "رُ "اتعرف عل "اج ب دس اد ا "تعلمخ ج ب ف ظخ ع ٍ لجيئة و "ا بس ع ب د

لث ش ح علي ب في و ً ِ ` "اذيز ي `.

"مذ "جذ ف ْ ز ِا "نس اعخ أ "مطب ع "خب ص ث أن "جب حا ِ "مطب ع العام في رخطيط ودا س "جب دس اد ا "تعلمخ

ث ج ب ف ظخ ع ٍ لجيخ. و "ب "جذ أ ْ عياسخ رغعير "اسياحخ ا "ظش يخ ؤ ث شا ع ب عي وفاعل و ا "زغخت في معد ز لجيخ

"رذ س ب. أب ث "مياس "اماي ` ا "ظ ق ب " لذ "جذ أ ْ ِظش ث ب و ُ و ب ف ِ ` "اماني ن و ا "وع غ ب د ا "ظ "خ "جي خ أ ْ ا ح ذ

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ث خ ظ ص دس و ً ِ "مطب عي ` "اعا ` ا "خ ص ف ئ "ا "وع غ ب د ا "ح ي ِيخ يجب أ ْ ر ِ "ث شو ث ف ب علي خ في حاب ف ظخ ع ٍ

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Dedication

To my grandmothers, Zainab Nummer and Roqaya Abdullah.

May they rest in peace.

Table of Contents

List of Figures

List of Tables

List of Abbreviations

AHED	Association for Environmental Health and Environmental Development
AOYE	Arab Organization for Youth and Environment
APOE	Association for the Protection of the Environment
APE	Association for the Protection of the Environment
ARE	Arab Republic of Egypt
CIDA	Canadian International Development Agency
CSR	Corporate Social Responsibility
DANIDA	Danish International Development Agency
EEAA	Egyptian Environmental Affairs Agency
EGP	Egyptian Pound
EHA	Egyptian Hotel Association
EIA	Environmental Impact Assessment
ENGO	Environmental Non-Governmental Organization
ETA	Egyptian Tourist Authority
FEA	Friends of the Environment
FEI	Federation of the Egyptian Industries
GDP	Gross Domestic Product
GM	General Manager
GTZ	Gesellschaft für Technische Zusammenarbeit
HEPCA	Hurghada Environmental Protection and Conservation Association
ICZM	Integrated Coastal Zone Management

MOT	Ministry of Tourism
MSEA	Ministry of State for Environmental Affairs
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NPA	National Programmes of Action
ODA	Official Development Assistance
OHD	Orascom Hotels and Development
PADI	Professional Association of Diving Instructors
PPP	Public Private Partnership
RSDASS	Red Sea Association for Diving and Water Sports
SIS	State Information Service
TDA	Tourism Development Authority
UK	United Kingdom
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollar
WB	World Bank
WTO	World Tourism Organization

Chapter One

Introduction

1.1 Conceptual Background

Tourism is a dynamic interdisciplinary field. Although this makes tourism study exciting, it makes planning complex. Tourism can be approached from the perspectives of a multitude of disciplines including anthropology, psychology, economics, law, architecture, and politics (Hall 2005). As a result of this diversity, the incorporation of varied viewpoints is crucial to the success of tourism planning and to the development process. Interdisciplinary collaboration is essential to ensure that policies are as efficient and effective as possible.

The private sector contributes increasingly to environmental depletion through tourism-related activities. Hotels, resorts, airlines, restaurants, tour operators, and the multitude of other service providers related to tourism are dominated by private investors. Yet, as the Norwegian Prime Minister, Gro Harlem Brundtland stated: "with greater freedom for the market comes greater responsibility" (Schmidheiny 1992: 1). Accordingly, as private investors play a large role in tourism, they should assume their share of environmental responsibility.

In recent years, the private sector has become increasingly environmentally active. However, private sector environmental initiatives are often met with criticism and the motives behind them questioned (Hu and Wall 2005). Some efforts are justified as being introduced for environmental purposes when, in reality, they may be favoured primarily because they are economically beneficial. Examples are electricity conservation methods or hotels encouraging guests to re-use towels, thereby saving on energy, water, detergents and labour. Environmental conservation

efforts that truly reflect environmental commitment will require attention to a triple bottom line (environment, economy and culture) and a long-term perspective (Hu and Wall 2005).

The Red Sea of Egypt presents an interesting case for studying the role of private investors in environmentally sustainable tourism development. The location is in a developing country that is highly dependent on tourism as a source of foreign income (Ibrahim and Ibrahim 2003). Also, Red Sea tourism is largely dependent on the surrounding environment such as sand and water quality, and coral reefs, which are sensitive to tourist activity. With low government control in the area and growth in private investments, the role of the private sector in tourism is increasingly vital to the success of environmentally sustainable tourism based on the coral reefs of the Red Sea of Egypt.

The country chosen for this study, Egypt, has a history of tourism that is at least 1000 years old. The river Nile, culture, and archaeological attractions have drawn people from around the world to the country. As a result, Egypt has traditionally relied on these assets as its competitive advantage as a tourist destination (Daher 2007). Gray (2000:401) sums up the tourism possibilities in Egypt as follows:

> The comparative advantage that Egypt enjoys is obvious; it contains the last of the Ancient Seven Wonders of the World still standing - the Pyramids at Giza - as well as innumerable other sites from ancient Egypt along the Nile River and in the deserts and the Sinai peninsula. Egypt‘s beaches and climate are spectacular, and the Red Sea is one of best scuba-diving sites in the world. It has a vibrant contemporary culture, whether in terms of its foods, its architecture, or its friendly, open people. When all of these attractions are combined with a skilled, inexpensive labor force with a long history of catering for tourism, it is of little surprise that the Egyptian government views tourism as an area of almost limitless potential.

Prior to the 1980‘s, tourism was not a direct concern of the Egyptian government. Most tourism activity was a result of tourists‘ interests rather than promotion. Although Egyptian tourism received some attention resulting from its image and historical attractions, investment in

this sector was limited. Only after former President Anwar Sadat's open-door policy, did national policy embrace tourism as a potential tool for stimulating economic prosperity (Daher 2007). Thus, tourism promotion in Egypt during the 1980's was largely tied to the economic liberalization movement.

Much has occurred in the past twenty years in development of the tourism industry in Egypt. Various new destinations in Egypt have been promoted for tourism including the Mediterranean coast, the Red Sea coast, the Gulf of Aqaba, Upper Egypt, and the Western Desert area (Daher 2007). This diversification of tourism in the country has been undertaken in hope that it will result in an increase in much-needed tourism revenue, economic growth and employment opportunities.

The Egyptian government is increasingly attentive to environmental issues (Gomaa 1997). Yet, while in most developed countries, environmental concern started through "grassroots" movements, and was then adopted in policies, in Egypt, environmental awareness was initiated by the government mostly as a result of the willingness of foreign institutions to donate money to support environmental causes under the condition that certain environmental standards are met (Gomaa 1997). Thus, because environmental awareness in Egypt has been introduced in a top-down rather than a bottom-up manner, the government has an increasingly difficult, yet important role as an environmental authority.

1.2 Study Purpose and Research Objectives

The Red Sea of Egypt has undergone rapid tourism development over the past 20 years. This development occurred with many gaps in legislation and implementation issues that have not been fully attended to. Among these is environmental policy. Legislators have been slow to

respond to environmental concerns and the legislation that exists has been poorly implemented. Accordingly, the status of environmental regulation in Egyptian tourism development will be evaluated through exploring the following research questions:

1. What is the Egyptian government‘s environmental policy?
2. What are the greatest constraints facing successful implementation of environmental policies?
3. How has privatization of the tourism industry influenced the implementation of environmental policies?
4. What is the role of the private sector in environmental sustainability in tourism?

In exploring these issues, this study is intended to assess the effectiveness of environmental policy in Red Sea tourism in Egypt and, thus, to contribute to the sustainable development of the region at large. The focus of this study is on the barriers to the implementation of environmental policy along the Egyptian Red Sea coast.

1.3 Organization of the Research Paper

Chapter 1 has provided a brief introduction to the research topic, contains the purpose of the study and a list of the research objectives, and also includes the following outline of this document. Chapter 2 builds the context of the paper through an overview of some issues surrounding environmental concerns resulting from tourism development in developing countries. These issues are discussed from the view-point of the private and public sectors, and their corresponding roles in environmental conservation. Destination pricing and its influences on the environment is also addressed. Chapter 3 describes the research methods used in this study and justifies for the choice of location, data collection method, and means of analysis.

Chapter 4 presents the findings of the study and discusses them. The findings are made up of a discussion of factors that affect environmental commitment in the Egyptian tourism industry, with a case study of the Red Sea cities of Hurghada and El Gouna. Chapter 5 discusses these findings in a broader context, and chapter 6 presents the conclusions of this study.

1.4 Conclusions

Although public and private sector collaboration in tourism is essential to the achievement of environmental protection, relatively little research has been published on the interaction between these two sectors and the environmental consequences on tourism development. Egypt is a developing country that depends on tourism as an essential source of income, relegating the environment to the bottom of its list of priorities. This study thus explores the roles of and interactions between the private and public sectors and the associated environmental concerns in the Egyptian tourism industry.

Chapter Two

Context

2.1 Areas of Literature

There are four main areas of literature that contribute to the academic context of this study. These areas are: Tourism in Egypt, the growing private sector, demand and supply, and low price consequences. The first area, tourism in Egypt is addressed in the previous chapter, and the other three chapters are discussed in this chapter.

2.2 Environmentally Sustainable Tourism Planning

Planning for sustainable tourism is a difficult and, arguably impossible task (Alipour 1996). This is due to a multitude of factors. Among these factors is the complex relationship between tourism and the environment, the multidisciplinary nature of sustainable development, the diversity of stakeholders involved in planning and managing tourism, and the variety of political, social, and economic factors that influence the success of sustainable tourism initiatives.

2.2.1 Relationship between Tourism and the Environment

Unfortunately, the relationship between tourism and the environment is unbalanced: ~~"t~~ourism is environmentally dependent and the environment is vulnerable to the impact of tourism" (Wong 1993: ix). It is possible, nonetheless, to attempt to balance this relationship through research on environmentally sustainable tourism, planning, and implementation. Yet this is not easy to do, and the difficulty of achieving sustainable development is increased in developing countries that rely heavily on tourism income, and in ecologically sensitive areas. In

this sense, nature tourism along the coral reefs of the Egyptian Red Sea presents a classical example of a challenge to sustainability. Not only are coral reefs sensitive to environmental changes and human contact, they are a tourist attraction and Egypt is in a developing country that relies on tourism income. Furthermore, the role of the private sector in tourism development in Egypt is encouraged and increasing (Gray 1998). This combination of dependency on tourism revenue, the large and increasing role of private investment, low government control, and an environmentally sensitive area make achieving sustainability along the Red Sea complex. Yet it is these same characteristics that make it worth exploring.

2.2.2 Multidisciplinary Nature of Sustainable Tourism Development

The many factors involved in various types of sustainability make sustainable development difficult to define. The most commonly-quoted definition is that found in the Brundtland Commission's report, *Our Common Future* (1987:8): ~~to~~ ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs". According to McMinn's (1997) interpretation of the ideas of the World Commission on Environment and Development, sustainable tourism implies accounting for the intergenerational impacts of tourism. Accounting for intergenerational impacts requires encompassing economic, political, social, cultural, ecological, and geographical characteristics into sustainable tourism development (Aronsson 2000). This makes it difficult to define. Furthermore, it is this multidisciplinary nature of tourism that makes sustainability difficult to achieve and this characteristic has probably caused sustainable tourism to lag in terms of both study and implementation.

More specifically, although the importance of private organizations has been recognized in the study of sustainable development and the linkages and relationships between stakeholders

acknowledged, they are often overlooked (Brown 1991). All stakeholders should be involved in the process of sustainable tourism in order to ensure its success. According to de Araujo and Bramwell (1999:356), ―participation in tourism planning by many stakeholders can help to promote sustainable development by increasing efficiency, equity and harmony".

2.3 Adapting Roles of Tourism Stakeholders

Tourism is a business and, as a field of study, it involves and requires contributions to and from stakeholders from numerous diverse stakeholders. Ryan (2002:20) defines a stakeholder as ―...any individual or identifiable group who is affected by, or who can affect the achievement of corporate objectives". As shown in Figure 2.1, several parties affect and are affected by tourism performance, policy and planning. The most influential stakeholders in tourism from an environmental perspective are found to be the government, shareholders, chains, hotel associations, travel agencies and tour operators, customers, competitors, employees, ENGOs and other suppliers (Alvarez Gil et al. 2001). Accordingly, and as supported by Figure 2.1 most of these parties are from the private sector. The private sector thus has a strong influence on the environmental consequences of tourism that is comparable in importance with that of other stakeholders.

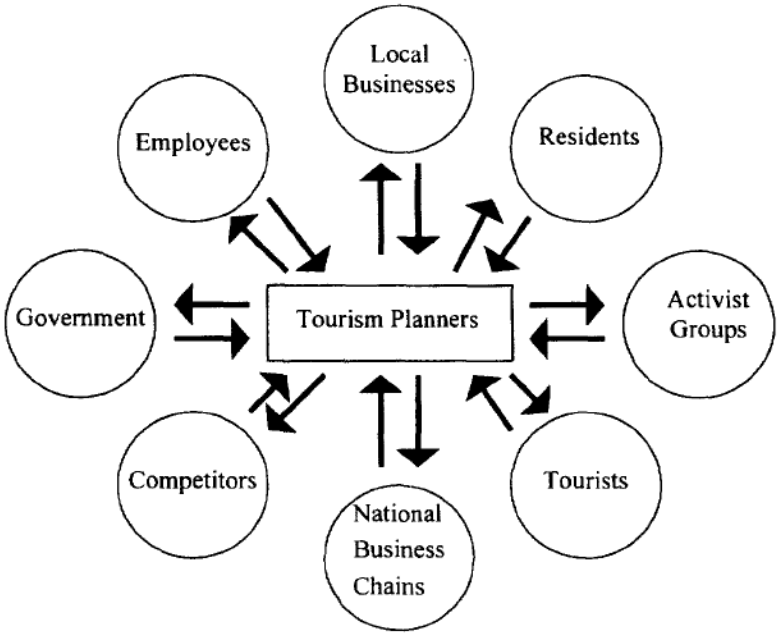


Figure 2.1 Tourism Stakeholders
Source: Ryan 2002

2.4 Privatization

There is a growing private sector in many developing countries, as privatization is a common form of structural adjustment among these nations. Hungary, Argentina, Brazil, Morocco, India, Bangladesh, and Tanzania are among a few of these countries that have instigated some sort of macro-level privatization program (El-Hayawan and Sullivan 1993). This form of structural adjustment, however, has substantial impacts on countries with large populations, low incomes, wide income disparities, and unemployment issues (Ramandham 1993), all of which are characteristic of developing countries.

Policy makers and practitioners should thus "...focus attention on establishing the impacts of privatization, on monitoring privatization, on regulation (sic) post-privatization, and on redefining the precise role of the government in the development strategy specific to a country"

(El-Hayawan and Sullivan 2000:56). It is especially important to regulate and monitor the performance of the growing private sector with respect to its environmental performance

2.4.1 Private Investors and Sustainable Tourism

The private sector is increasingly responsible for many societal changes (Donaldson 1982). It has become a key player in globalization, politics, environmental degradation and economic development (May et al. 2007). Private investors and companies are often so profit-oriented that when environmental action entails increased spending with no direct financial benefit, it will most likely be avoided. It is thus surprising that although the impact and control that corporations have in the tourism industry are acknowledged, little attempt has been made to appeal to them to operate sustainably using facts and figures from the perspective of corporations.

Tourist accommodation facilities are one of the most obvious areas that require a relatively high degree of environmental commitment, and there is a great variance in the level of commitment between facilities. In fact, the level of environmental commitment in a tourist accommodation facility depends on a number of factors. Graci (2007) identifies 21 factors (see Appendix B). These factors can hinder sustainable tourism development just as they can facilitate it in the accommodation industry.

2.4.2 Private Sector Sustainability Concerns

Unfortunately, private investors often underestimate the potential for adverse outcomes when making plans, or often find them to be outweighed by potential gains. When problems arise, they may be quick to cover up the harm and rid themselves of any responsibility. Adding to this concern, responsibility is diffused within the organizational structure, so there is often no

single individual to blame for a given decision, which facilitates questionably moral actions (Hamilton and Sanders 1999).

> The corporation Microsoft can do far more than the human Bill Gates because it is an organized concentration of humans under his command. This entrepreneurially led corporation may be seen as more responsible than individual actors because it is judged to be a kind of ‗large human' (Hamilton and Sanders 1999: 231)

Donaldson (1982:1) further questions the morality of the decision-making process of corporations based on the fact that "unlike a real person, the corporation has no conscience to keep it awake all night, no emotions for the psychiatrists to analyze, and nobody to be thrown into jail".

Additionally, the concept of sustainability is vague, and thus exploited by the industry to validate their policies and activities. In this sense it may be the case that sustainability acts as a hindering force to effective environmental attention. In fact, many hotels and operators take advantage of the growing demand for environmental sustainability by claiming corporate social responsibility (CSR), regardless of any action taken towards CSR (Mowforth and Munt 2003). This reveals a common deficiency in the environmental policy of tourism practices. Tourism managers are usually aware of the growing expectations for environmentally friendly forms of tourism, especially among wealthier tourists, yet their demands have not often been met with an environmentally effective solution. Furthermore, a large proportion of the tourism industry is controlled by huge multinational corporations. These hotels and resorts claim to be "green" based on the rate at which towels are changed and by attempting to conserve electricity (Mowforth and Munt 2003). These companies, however, often do not instigate long-term environmental plans that consider the environment of the surrounding regions (Corporation 2005). Sustainable development requires that environmental consideration become a main focus

of the decision-making process (Schmidheiny 1992). It is thus crucial that corporations become genuinely interested in environmental sustainability. The success of tourism and, thus, private investments relies on the preservation of natural sites. This can only be achieved with the internalization of externalities such as environmental degradation.

2.4.3 Private Sector Environmental Initiative in Tourism

It would be wrong to assert that no private sector environmental initiatives have been taken. Already, with the little effort that has been exerted, companies claim huge cost-savings from environmental action. Hyatt Hotels estimate over $3 million of annual savings resulting from environmental awareness and recycling programs, while Inter-Continental Hotels estimate annual savings of $10 million as a result of improved energy efficiency (d'Amore 1993). The problem lies in convincing these and other companies to take the next step, where they may initially have to spend money and make drastic changes in the way their business is conducted. In essence, "... the major challenge in implementing sustainable tourism is to establish sustainable development as the primary strategic objective for the tourism industry" (Stabler 1997:51).

2.4.4 Internalization of Environmental Degradation

An externality is "any benefit or cost borne by an individual that is a direct consequence of another's behaviour and for which there is no compensation. Externalities are internalized when adjustments are made such that each individual bears all the costs and benefits of his or her actions" (Todaro and Smith 2006: 812). Accordingly, a successful environmental strategy forces those who profit from tourism to participate in the assumption of associated environmental costs. Since it is ultimately hotels and resorts that frequently make the largest profit from tourists, they should be responsible for assuming greater environmental responsibility.

Although markets encourage efficient resource use, in the past they have avoided integrating environmental costs into economic decisions. Accordingly, environmentally sustainable tourism development entails that externalities are assumed by the benefiting organization (Schmidheiny 1992). From this economic standpoint, it is important to remember that attending to environmental issues has long-term financial benefits. Corporations and private investments such as hotels, resorts and tour operators can in fact reap financial benefits from attending to environmental sustainability:

> Corporations too stand to benefit by moving toward ecological sustainability. They would benefit by reducing costs through ecological efficiencies, capturing emerging _green' markets, gaining first-mover advantage in their industries, ensuring long-term profitability, establishing better community relations, and improving their image (Shiravastava 1995: 937).

Without environmentally sustainable tourism, there would be no sustainable tourism and, thus, no sustainable revenue. As stated by the World Tourism Organization –the environment is tourism's base... it depends to a large extent on natural resources, both for passive tourism (i.e. sightseeing) and for participatory tourist activities (e.g. hiking/trekking, water-based sports)..." (Goodwin 1996: 282). In the case of nature tourism, which is often the cause of the greatest environmental threats, it is the vulnerable area that attracts tourists (Goodwin 1996), and if it is not protected they will no longer have reason to come.

2.5 The Role of Government as the Environmental Regulator

As the environmental regulator, the government should acknowledge the various roles that each stakeholder serves, and –as tourism planners, it is important to consider the interests or perspectives of the different stakeholder groups as defined by the roles which they serve with regard to the particular development initiative" (Sautter and Leisen 1999: 316). Consider the role of a nature tourism resort. It represents a tourism attraction, and thus plays a role as a stakeholder

in attracting tourists. Yet it is also a stakeholder in profit-making, job creation, and nature conservation. Unfortunately however, various stakeholder roles of a single organization can conflict, resulting in the avoidance of one or more responsibilities. This applies to situations where a resort fails to perform its role in nature conservation due to dominance of its role of profit making. In fact, neglect of one of the roles in order to achieve another role is not uncommon among tourism investors. Realizing that sustainable development is a marketable claim, Butler (1999), private investors may claim to participate in greening the tourism industry, but these changes may have little or no effect on sustainability.

2.6 Destination Pricing

Demand and supply are the basic determinants of the price for any good or service. Similarly, the general price of a destination, or its relative cost as compared to other destinations that offer similar attractions, is based upon the supply, or its capacity and the number of tourists who wish to visit it.

2.6.1 Supply

Attractions are the key to tourism supply. Without attractions, there is no tourism. Tourism attractions are varied in type, but can generally be classified into three main categories (Vanhove 2005: 76):

1. Primary natural attractions
2. Primary human-made attractions
3. Purpose-built attractions.

Primary natural attractions are naturally existent and are mainly comprised of nature attractions. Primary human-made attractions are not built for the purpose of tourism, but attract

tourists. Examples of these can vary from historical monuments such as the pyramids, to ethnic groups such as Sahara Bedouin tribes. Purpose-built attractions are the only type of attractions that have been constructed to attract tourists, thus increasing supply.

The number of tourists these attractions can serve is not only determined by the capacity of the attractions themselves, but also by four other supply components (Goeldner et al. 2000:365-66):

1. Natural resources and environment
2. The built environment
3. Transportation
4. Hospitality and cultural resources

The natural resources and environment component makes up the largest possible supply threshold. This dictates the maximum level for the built environment, which includes the infrastructure (roads, networks, sewage systems, etc), and superstructure (airports, shopping centres, hotels, etc) (Goeldner et al. 2000). The available transportation and the culture of the destination also play a role in determining the supply capacity.

This thought is somewhat in line with the concept of a destination having two potential carrying capacities: ecological and social. The ecological carrying capacity is determined by the ability of the natural environment to withstand a number of users before it starts to be affected by their presence, whereas the social carrying capacity is the number of people that can enjoy a destination or recreational facility without impacting other users‘ level of enjoyment (Leujak and Ormond 2007). This idea, however, suggests that it is possible for the capacity of the built

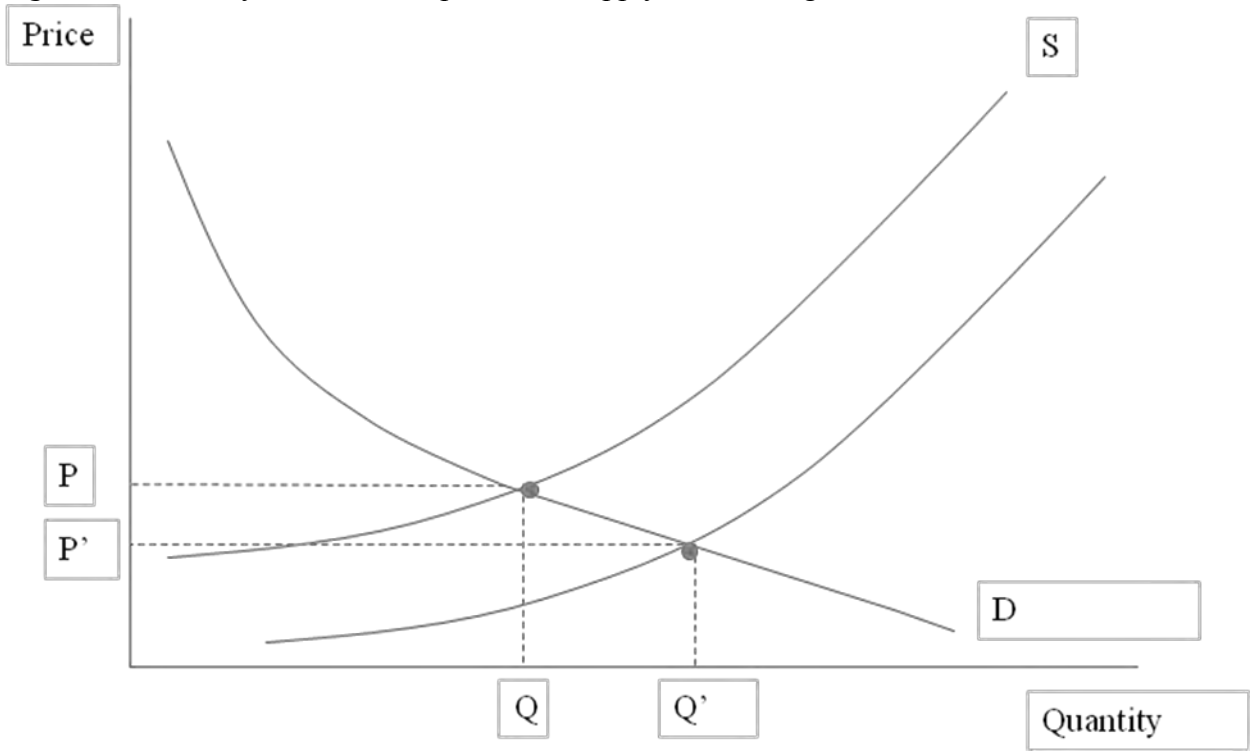
environment to exceed that of the natural environment. It is this discrepancy that results in environmentally unsustainable tourism.

Therefore, it is essential that, in order for tourism to be sustainable, the natural environment be the dictator of the maximum supply for tourism, rather than the built environment. Unlike other industries, where an increase in demand is usually met by an increase in supply, an increase in demand in natural resource-based tourism should be met by a price increase so that demand does not exceed the supply as dictated by the natural environment.

2.6.2 Demand

Tourism is sensitive to the quality of the destination. By accepting an unsustainable form of tourism, the natural environment will degrade, thus depreciating the overall tourism experience, and lowering the demand for the destination (Goeldner et al. 2000). It is thus necessary that demand be kept in line with the supply and the most obvious way to achieve this is by increasing the visitation cost. However an increase in supply results in a decrease in price. This can be demonstrated using the basic economic demand and supply graph shown in Figure 2.2. The demand curve, labelled D, and the supply curve, labelled S, together determine the price and quantity. In tourism, this could be the hotel prices and the number of guests. When the available supply increases, for example, by building more hotels, the supply curve shifts to the right, and a new supply curve, S‘ applies. Price and quantity then adjust to suit this new supply, and correspondingly quantity increases from Q to Q‘ and price decreases from P to P‘.

Figure 2.2 Quantity and Price Responses to Supply-Side Changes



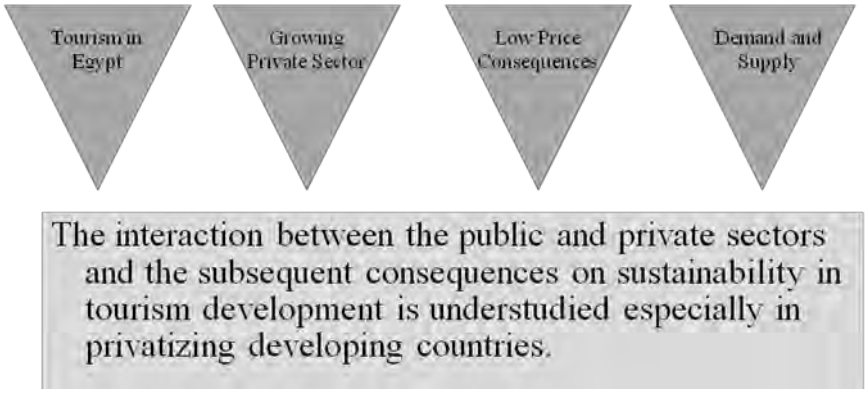
Similarly, if demand is lower than supply, policy makers have options of strategies to deal with low occupancy. Two such options are multiple use and price differential (Goeldner et al. 2000). With the multiple use strategy, the attraction, accommodation, or other tourism asset can be used during non-peak periods for other purposes such as hosting conferences, sport events or other festivals. The other option of dealing with low demand is to lower the price until the required demand is met. These strategies are typical for non-peak seasons, which justifies having a built environment that exceeds demand during a given time period. Thus, in tourism, demand must be adjusted for supply, which is ultimately dictated by the natural environment, and not the other way around, as with most other industries.

2.7 Conclusion

This chapter establishes that sustainability comes in a variety of forms, and is affected by a variety of stakeholders, making it difficult to define and to achieve. The government cannot be

the sole custodian of the environment because the private sector impacts a number of factors that contribute to environmental sustainability including the built environment, supply capacity and destination price. As shown by Figure 2.3, the four areas that inform this study, tourism in Egypt, growing private sector, tourism demand and supply, low price consequences have led to a gap in the literature which this thesis addresses.

Figure 2.3 Literature Gap



Egyptian Red Sea tourism provides a classical example of a challenge to environmentally sustainability. This comes as a result of the economic restructuring that took place in the 1980‘s, and the subsequent growing role of the private sector. Today, the Egyptian government assumes full environmental responsibility, which often conflicts with its foremost priority of creating employment opportunities, and improving the acquisition of foreign income. Similarly, the private sector cannot be relied on to attend to environmental concerns without government supervision as its primary and often single objective is revenue generation, although there are number of benefits to private businesses which are a consequence of attending to environmental issues.

Chapter 3

Research Methods

3.1 Site Selection and Justification

3.1.1 Site Selection

The Red Sea region in Egypt is chosen as a case study location. Egypt is a developing country that has been involved in economic reforms which were created to target inflation, stabilisation, and the balance of payments. These factors helped shape current trade liberalization efforts (Helmy 2004).

A number of cities constitute possible sites for studying tourism along the Egyptian Red Sea coast. These include Sharm El Sheikh, Dahab, Marsa Alam, Nueiba, and Taba. I had initially intended to examine Sharm el-Sheikh, based on its popularity and high regard, both nationally and internationally, as a recreational city and because of the value of its natural resources and coral reefs. However, after conducting interviews in the Ministry of Tourism and the Environmental Affairs Agency, it became evident from government concerns resulting from large-scale tourism development that took place over a relatively short time-span that most of the concern and discussion surrounded Hurghada. These concerns mostly surrounded maintaining biodiversity especially in coral reefs. I therefore chose Hurghada as the designated case-study site and El Gouna, which is 30 km to its north, is also considered.

3.1.2 Site Justification

3.1.2.1 Egypt

Tourism is the most important source of foreign income for Egypt. It is a labour intensive industry, which in 2004 contributed 2.2 million jobs in tourism and feeder industries and services. It accounted for 11.3% of GDP, and provided 2.8 billion EGP annually from fees and taxes on tourist spending (Helmy 2004). According to Egypt's 2005/2006 Balance of Payments travel receipts to Egypt represented 20% of all receipts on exports and services.

3.1.2.2 The Red Sea of Egypt

The Red Sea coast is an area that has been targeted and developed for tourism purposes (Shaalan 2005:83). Prior to this movement, the Red Sea of Egypt had been largely uninhabited and generally neglected. Today, there is strong promotion of nature tourism in the country. This is evident in the opening statement on the homepage of the Egyptian Ministry of Tourism's promotional website, www.touregypt.net:

> Most people who think of Egypt think of antiquities, but Egypt offers much more. Certainly it is a prime location to see our great heritage from the ancient world, including Pyramids and wonderful temples, but it is also part of the Holy Land, and tours to Christian and other religious monuments are popular. Yet Egypt also offers nature and desert treks, great scuba diving and even golf, fishing and birding expeditions. One may choose to relax on the wondrous Egypt Red Sea or Sinai coasts, take in the high culture of Cairo, or even leisurely float down the Egyptian Nile on a luxurious river boat ("Egypt Guide" 2005).

Today much of the Egyptian tourism development effort has been dedicated to promoting the Red Sea. However, prior to the 1990's, "activity in the red sea (sic) was limited to offshore oil exploration, phosphate mining, and fishing on a limited scale" (Shaalan 2005:83). Interest in this area was only sparked after the realization of its potential as a tourist attraction and potential economic benefits. In order to encourage tourism in the area, the Egyptian government passed a law in 1984 that encourages tourism investment by offering attractive propositions including tax

exemptions, reduction of customs duties and guaranteeing freedom of decision making concerning business management (Gray 1998).

In 1999, ~~–~~90% of Egypt‘s tourism investment [was] concentrated in coastal resorts or southern Sinai, with a product portfolio on dive tourism and beach holidays around the Red Sea Gulf of Aquaba” (Shackley 1999). As a result, tourism revenue in Egypt increased by 53% from 1988 to 1992 (Alavi and Yasin 2000). This area is one of the world‘s fastest-growing resort areas, resulting in environmental concern for the coral reefs and the desert hinterland (Shackley 1999).

There are three key players that have contributed to tourism development in the Sinai: The government, tourists, and the local people. Egyptian authorities, or the government, have been focusing on the Sinai area as a result of its financial potential. Tourists themselves also play a large role as the types of tourists are vital to the success of the region. Generally, wealthier tourists have been the target group and, in order to attract them, an effort has been exerted to create a perception of the area as a paradise. Locals have also been major players in the development of the Red Sea region for tourism (Daher 2007). The roles of the public and private sectors will be considered in terms of how they attend to environmental concerns, and the types of tourists that are targeted. The impact that these tourists subsequently have on the natural environment is discussed. As will be seen, this has played a large role in a shift in the policy structure.

3.1.2.3 Hurghada

The rapid rate at which Red Sea tourism has expanded is reflected in the growth of hotel beds from 20,000 in 1998 to 34,700 only three years later in 2001 (Ibrahim and Ibrahim 2003). Much of this growth was concentrated in major tourist cities on the Red Sea including Sharm el-

Sheikh, Hurghada, and Safaga. The growth of Safaga and Hurghada are largely tied to one another as a result of their close proximity to one another, and because tourists to Safaga often arrive at the Hurghada airport. Additionally, Safaga gained popularity largely a result of the poor environmental conditions of Hurghada beaches.

Hurghada was originally a small fishing village, and later, in the 1980s became the first tourist resort on the Egyptian Red Sea, and the only other comparable destination in the region at the time was Eilat, Israel (Hawkins and Roberts 1994). Its coast extends for about 62 km along the Red Sea, and it is mainly supported by tourism from water-based sports and activities (Frihy et al. 1996).

Prior to the 1980s, the beaches were not easily accessible and thus attracted a limited number of backpacker tourists. Only when the potential for investment was realized by business people, were large hotels and resorts constructed, resulting in an influx of tourists to the area. However, due to the overcrowding and poor planning of Hurghada, Safaga became an attractive alternative destination aided by its close proximity being only 50 km to the south. Both cities attract scuba divers with their abundance of coral reefs, white sandy beaches, exotic fish, clear water and year-round warm climate and boast some of the best diving sites in the world (Ibrahim and Ibrahim 2003; Gray 2000). However, the success and sustainability of tourism in the Red Sea is threatened by the very industry which supports it, making it an appropriate destination for studying environmental commitment in the Egyptian tourism industry.

Today Hurghada has completely transformed into one of Egypt‘s premiere destinations and is home to over 35,000 residents, sprawls over approximately 60 km, and houses over 170 hotels and resorts, and approximately 60 dive centers (Serour 2004).

Hurghada‘s clear blue water, year-round sun and warm weather make it an attractive destination and home to a host of tourism activities including swimming, diving, coral-reef viewing, sightseeing from glass-bottom vessels and submarines, boating, underwater photography, sport fishing, beach sports and sunbathing (Frihy et al. 1996). Over one hundred major recreational projects have been constructed in Hurghada. Uncontrolled tourism development threatens the marine and coastal environments and has become a source of national concern.

3.1.2.4 El Gouna

When conducting research in Hurghada, I resided in El Gouna, which is north of Hurghada. It quickly became evident from articles in the El Gouna magazine, signs lining the beach, notices around hotels promoting water and conservation, fenced-off mangrove trees, and an emphasis on recycling and water treatment, that the environment was a major focus of the planning and operation of the town as a whole. This is how the idea of comparing environmental commitment in the two cities emerged.

El Gouna is a self-contained town located 22 km north of the large tourist city of Hurghada. Its construction was initiated in 1990 by the privately-owned Orascom Hotels and Development Company. El Gouna was created in partnership with hoteliers, businesses, architects and service providers. Its total area covers 36.8 million square meters of which today 10.8 have been developed. It covers 10 km of beachfront and over 20 islands surrounded by lagoons. It has won awards for its architecture and environmental quality. Over 2,500 homes have been built and sold, and the resort houses 10,000 residents from around the globe.

El Gouna currently has 14 hotels with a total of 2,702 guestrooms, 100 restaurants, bars and eateries, a private airport, a hospital, and resort-wide transportation by bus, boat or rickshaw.

It is also home to an 18-hole championship golf course, a library, hotel training school, university centre, and a K-12 school (Orascom Hotels and Development 2008).

The defining features of the town are its award-winning architecture and environmental commitment reflected in its environmental awards, including Green Globe certification. One of the main attractions is the abundance of water sports, especially kite-surfing and diving, each of which has designated beach areas. There is also a great expanse of public beaches, which is not typical of Egyptian beach resort areas. The main market of El Gouna is from Western Europe, namely Germany (25-30%), UK and Belgium (–Pilot Destination" 2008).

The following statement, from the official El Gouna website elgouna.com sums up the environmental initiative in the region:

> El Gouna has been officially recognized as Egypt's most environmentally-friendly holiday destination, and El Gouna management has worked hard in cooperation with local hotels, businesses, residents and visitors to maintain, protect, and preserve its unique environment. The town's environmental programs and grassroots environmental organization paved the way for several awards, including the Green Globe (Orascom Hotels and Development n.d.)

El Gouna has chosen to distance itself from Hurghada so that it is not associated with the similar issues of unorganized development and environmental degradation. El Gouna planning and management have made a point to place El Gouna on the map separately from Hurghada in order to emphasize this point (Key Informant Interview 19, 2008). This is shown in Figure 3.1 on the map from the Egyptian Ministry of Tourism's official tourism promotion site.

Figure 3.1 Map of Egypt from MOT Official Tourism Promotion Site

Source: Egyptian Tourist Authority 2007

3.1.3 Environmental Impacts of Coastal Tourism on the Red Sea

Although tourism development in Hurghada started in the late 1980s, an integrated coastal management system was not instigated until a decade later (Jameson et al. 2007). As a result, there has been substantial stress and damage of the natural resources in the region. Coral reefs, in particular, are an attractive tourism asset: they are the second most biologically diverse ecosystem after tropical rainforests, and can offer an enjoyable experience to tourists. Although the tourism movement in the Red Sea of Egypt has benefited the economy financially, this has unfortunately been accompanied by degeneration in the coral reefs of the Red Sea.

A study by Jameson et al. (2007) that compares four coral sites exposed to extensive tourism with a site that is fairly unexposed (all located near Hurghada) finds that all four of the tourism-exposed sites suffered from physical damage reflected in consistently having a lower frequency of hard coral (especially *Acropora* coral), higher percent of soft coral, and a higher percentage of algae. This coral reef damage was primarily a result of anchor and diver damage (Jameson et al. 2007; El Gamily et al. 2001) and dynamite fishing (El Gamily et al. 2001).

The 50 genera of corals in the Red Sea are threatened by mismanagement of human activity in the area. Loss of biodiversity has resulted in numerous impacts including social, economic, cultural, managerial and scientific consequences (Crosby et al. 2000). In terms of environmental impacts, coral deterioration disturbs the coastal ecosystem, resulting in "coral death, loss of the complex habitat structure and decrease of associated invertebrates" as well as fish reduction, an increase in algal growth, planktivores, herbivores and detrivores (Khalaf and Kochzius 2002:287).

Environmental impacts of tourism in Hurghada are not limited to coral reefs. The main impacted areas other than coral islands and coral reefs and diving sites are the shoreline, old urban areas and road network, and the Hurghada airport (El Gamily et al. 2001). Urban expansion and landfilling are the leading cause of shoreline environmental degradation (El Gamily et al. 2001).

3.2 Data Acquisition and Analysis

This thesis is mainly an extended synthesis of secondary sources, with supplementary primary data. Secondary data about tourist numbers and characteristics, and investment in Egypt and in tourism were fundamental to this study, and were obtained from government sources on tourist numbers income from tourism, and tourist nationalities among other factors. Some of this data was physically acquired from various authoritative bodies, while others were acquired from official government websites. These data provide an indication of the magnitude of tourism and the rate of change and are used as indicators of the growing pressure of tourism on the environment. Additionally, pertinent laws and legislations were examined, key participants were interviewed, and parts of the Red Sea touristic areas were observed in order to gather further data for this study. These data collection methods are discussed in the following sections.

3.2.1 Laws and Legislation

In order to analyse the implementation of environmental policy laws and regulations pertaining to environmental impacts of tourism in Egypt were carefully examined. These laws are Law No. 4 of 1994 (the environmental protection law), Law No. 1 of 1973 concerning Hotel Establishments, Laws No. 1 of 1973 and No. 38 of 1977 concerning the Organization of Tourist Companies, and Law No.1 of 1992 concerning Tourist Establishments. Also, the National Environmental Action Plan of Egypt 2002 (NEAP) was studied. These laws and regulations were deemed crucial based on either their environmental or tourism-sector relevance. Specific sections of the law were seen as most relevant to environmental impacts of the environment especially on coastal areas were focused on in this phase of the study.

3.2.2 Unstructured Interviews

Gathering data for this study largely depended on interviewing key participants. The majority of interviews were face-to-face with a few exceptions of telephone interviews. This data collection method has the advantages of providing historical information, gaining information from participants when it cannot be observed, and it grants the researcher control in questioning (Creswell 2003).

A total of nineteen unstructured interviews were conducted with informants associated with environmental issues resulting from tourism in Egypt from various sectors during May and June of 2008. From the public sector, three interviews were conducted with the main environmental authority, the Egyptian Environmental Affairs Agency (EEAA), four with various authorities and employees from the Ministry of Tourism, as well as two more from the Chamber of Dive Centres and the Egyptian Tourism Federation, which are government-affiliated groups. From the private sector, a total of four in-depth interviews were held with employees of

resorts and hotels, and dive centres from the Red Sea were interviewed. Five NGOs were also interviewed concerning their conservation efforts, and to obtain any other information that might be useful in the study. These groups are Hurghada Environmental Protection Association (HEPCA), Canadian International Development Agency (CIDA), Danish International Development Agency (DANIDA), and United States Agency for International Development (USAID). Red Sea conservation activists, scholars, and marine environment consultants also provided much assistance. These interviews took place in the Egyptian capital, Cairo, and in the tourism cities of Hurghada and El Gouna.

The snowball method of gathering interviewees was employed, and the although an initial set of questions was planned, most of the interviews were unstructured, conversation-style interviews that surrounded central themes, giving interviewees maximum room for discussion and to allow them to cover any topics that they thought pertinent, that the researcher was unaware of. Interviews were held until no new ideas were being introduced by interviewees, or when central recurring ideas became apparent by being stressed by several interviewees. Interview notes were written by hand during the interview, and later type-written and organized. None of the interviews were recorded in order to give interviewees maximum comfort and freedom of expression.

The interview themes, sample questions and segments of interviewees were reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo prior to the commencement of the interviewing phase of this study.

3.2.3 Observation and Recording

Another data collection method that was employed during this research is observation. The complete observer type of observation method was used where the researcher observes without participating. The main advantages of this method is that it exposes the researcher to topics that participants may feel uncomfortable discussing, as well as providing the researcher with the opportunity to observe unusual aspects (Creswell 2003). In this research observation was mostly used to validate or negate findings from the other data collection methods used in this study, as well as introduce new ideas, which were often incorporated into interview questions.

Observation is significant to this study because the implementation of environmental policy and environmental commitment is reflected in visual aspects of the destination. The overall design and city planning are can be observed by traversing the city. City management is reflected in a number of aspects including the amount of garbage around the city, on the streets and on the beach. Signage educating tourists and locals of appropriate environmental practices were made note of. Sewage treatment plants and dumping areas were also identified. The types of tourists and their choice of activities reflect the status of the destination in terms of tourism policy and planning. All of these factors were made note of and recorded.

3.2.4 Data Analysis

The primary form of data analysis was a comparison of the findings from observation and interviews on environmental policy implementation as compared with supporting laws and jurisdiction. Areas where implementation is lacking were subsequently determined and probed through additional interviews and observations in the field. The researcher thus able to establish areas where environmental implementation is lacking and reasons why there is no follow-

through in enforcement of environmental policy. Accordingly, suggestions will be made on ways to improve policy implementation related to the environment in Red Sea coastal areas.

3.3 Nature of Evidence in this Study

Evidence in this study is largely based on abduction where abduction is viewed as "...a process of reasoning in which the logic of discovery is emphasized over the logic of justification" (Miller and Fredericks 2003:3). In order to affirm the validity of the findings made in this study, additional strategies were used. In particular, Creswell (2003) recommends using several strategies to verify the validity of a research's findings. Some of these approaches were employed in this study including triangulation, member-checking, and presenting discrepant information.

3.3.1 Triangulation

Triangulation involves using "...different sources of information by examining evidence from the sources and using it to build a coherent justification for themes" (Creswell, 2003: 196). Triangulation of information from different sources became an essential method of verifying information provided by participants. Whenever possible, qualitative data that resulted from interviews and field work was triangulated against findings from other studies, or quantitative evidence. The quantitative data was typically secondary data gathered from government sources or from other studies. The information was also verified by on-site observation in the field, and by analysing related legislations to establish the validity of findings.

3.3.2 Member-Checking

Member-checking seeks to validate findings by "...taking the final report or specific descriptions or themes back to participants and determining whether these participants feel that

they are accurate" (Creswell, 2003: 196). This method was also essential in validating the findings of this study because of the number of various stakeholders involved and interviewed. When conclusions were made about the objectives and priorities of a given stakeholder, this finding was presented to at least one representative member of that party in order to ensure accuracy of findings. This method, however, was employed with caution as stakeholders, especially those from government sources, may have hidden motives which they may be unable to confirm.

3.3.3 Presenting Discrepant Information

This study presents a topic that involves many stakeholders, each with different perspectives and agendas. It is critical to the credibility of evidence provided by this study that information is presented from contrary perspectives. In-depth interviews were conducted with diverse stakeholders from various sectors, so that issues surrounding tourism development and the environment were recognized from different angles. This is especially relevant to situations where the programmes of public and private sectors intersect such as environment-development disputes.

Chapter Four

Findings

4.1 Tourism and a Changing Economic Structure

The Egyptian government did not particularly concern itself with attracting tourists and tourism investment prior to the 1980s. Most tourism activity was a result of tourist interest rather than promotion. Although tourism received some attention as a result of Egypt‘s image and historical attractions, investment in this sector was limited. Only after the introduction of former President Anwar Sadat‘s Open-Door Policy, did the government embrace tourism as a potential tool for stimulating economic prosperity (Daher 2007). Thus, tourism promotion in Egypt during the 1980‘s was largely tied to the economic liberalization movement. Since the economic opening-up of the country in 1974, led by President Sadat, Egypt has increasingly replaced import substitution policies with an economic management and expansion policy based on the growing role of the private sector (Gray 1998). Egypt, like most developing countries, has tended to shift towards being a market-oriented economy, thus adopting privatization policies (Omran 2004).

Sadat‘s liberalization policy spurred growth in private investment in the tourism sector during the mid 1970‘s. Private investors were partially local and partially foreign. International tourism-oriented firms such as American Express opened branches during this time period; however most of the tourism was dominated by the state-owned Misr Travel until the 1980‘s (Gray 1998). In the early 1980s, the newly appointed Minister of Tourism, Fuad Sultan, had significant impacts on the sector as a result of his pro-liberalization approach to tourism. Sultan‘s policy resulted in the liberalization of airline rules, and more importantly, he allowed foreign

firms to manage and operate poorly-performing state-owned hotels. These hotel operators include the Hilton, Meridian and Marriott (Gray 1998). Tourism revenue became increasingly important to Egypt especially as it was during this time that the economy began to suffer the impacts of the Gulf War in the form of reduced aid and remittances of Egyptian nationals working in the Gulf region (Sivan 1997).

The Egyptian tourism industry was one of the most impacted as a result of privatization and economic liberalization. Although the tourism sector in Egypt was historically dominated by government control, it has a long history of private involvement. The Nile Hilton hotel in Cairo was established in 1958 and the Thomas Cook company entered the market in the 1980s (Gray 1998). The private sector responded quickly to liberalization policies and, by 1993, the majority of investment in tourism was made by the private sector (Gray 1998). Table 3.1 outlines the evolution of the institutional and regulatory framework of tourism development in Egypt and how the private sector plays an increasingly large role in Egyptian tourism development.

As a result of the open door policy, the past twenty years have been a period of considerable tourism growth in Egypt. Specifically, the Mediterranean coast, the Red Sea coast, the Gulf of Aqaba, Upper Egypt, and the Western Desert area have been targeted for tourism development (Daher 2007). This diversification of tourism areas in the country has occurred with the objective of increasing much-needed tourism revenue, in addition to contributing to economic growth and employment opportunities (Shaalan 2005). A summary of a history of the changes in Egypt‘s institutional and regulatory framework of tourism development is illustrated in Table 3.1.

Table 3.1 The Institutional and Regulatory Framework of Tourism Development in Egypt

Year	Measure	Content
1971	*Law No. 65/1971*	First step of the Infitah [open-door] politics. Introduction of Free-zones and granting of the possibility to build joint ventures with public companies of foreign investors.
1973	*Law No. 1/1973*	Overall competence for the management of the tourism sector is given to the Ministry of tourism (MOT). Law no 1/1973 gives MOT full responsibility to regulate the sector. The new law grants tax exemptions for 5 years and the exemption from import duties for qualified tourism companies
	Law No. 2/1973	Further powers are given to the MOT including the *exclusive* competence to designate areas for tourism development/expansion
1974	*Law No. 43/1974*	Opening of the economy to foreign investors, who are allowed to invest as minor partner in joint ventures (majority of 51% has to be Egyptian). Projects under Law 43/1974 enjoy tax exemptions for a period of up to fifteen years. Admission of bank-joint-ventures. Guarantee of property rights for Egyptian land and for capital of foreign firms.
1977	*Law No. 32/1977*	Third, fundamental law of the Infitah. Granting foreign investors the right to repatriate profits and to withdraw freely their investment. Amendment of Law 43/1974 encourages domestic investment through legal equalisation of domestic with foreign capital concerning the Infitah-privileges.
1981	*Presidential decree No. 712/1981*	The MOT is provided with extended competencies for tourism facilitation, research, development, industry control, tourism marketing, coordination and policy.
1982	*Five-year-plan, 1982-1987, div. ministerial decrees*	Implementation of five-year-plan fosters infrastructural development on the Sinai and on the Red Sea. Easing of regulations for foreign firms to manage and operate hotels. Liberalisation of airline rules.
1988	*Prime Ministerial decree No. 933*	The MOT receives the exclusive competence for the development planning and coordination of the provision of infrastructure in all designated as tourism zones.
1989	*Law No. 230/1989*	First *Investment Law* replaces regulations set by Law No. 43/1974; the new law allows for full foreign ownership in some economic sectors, including tourism, includes guarantees against expropriations and against the deprivation of operational licences for private companies are provided, but still maintains restrictions for foreign investments. Investments are promoted in desert areas where tax holidays for ten years are granted.
1991	*SAP*	Privatization of public owned hotels and tourism companies is part of the agreement. Substantial privatisation does not take place.
	Law No. 7/1991	Establishment of the Tourism Development Authority (TDA). The TDA bundles the formerly fragmented responsibilities for the spatial planning of tourism development in Egypt. Generation of a comprehensive plan for tourism development, covering all costs along the desert areas of the country.
1994	*Law No. 38/1994*	Foreign Exchange Law guaranteeing unrestricted repatriation of profits and capital, and protection of brand names and intellectual property.
1997	*Law No. 8/1997*	Second Investment Law simplifies the existing rules and regulations for the establishment of firms and 16 economic sectors are defined, which receive extraordinary legal and fiscal privileges including all kind of tourism businesses with defined minimum standards. Tourism companies established under law 8/1997 receive 20 years tax exemption and grant facilities of import regulation and tariffs.

Source: Richter and Steiner 2007

4.2 Environmental Impacts of Tourism in Egypt at a Glance

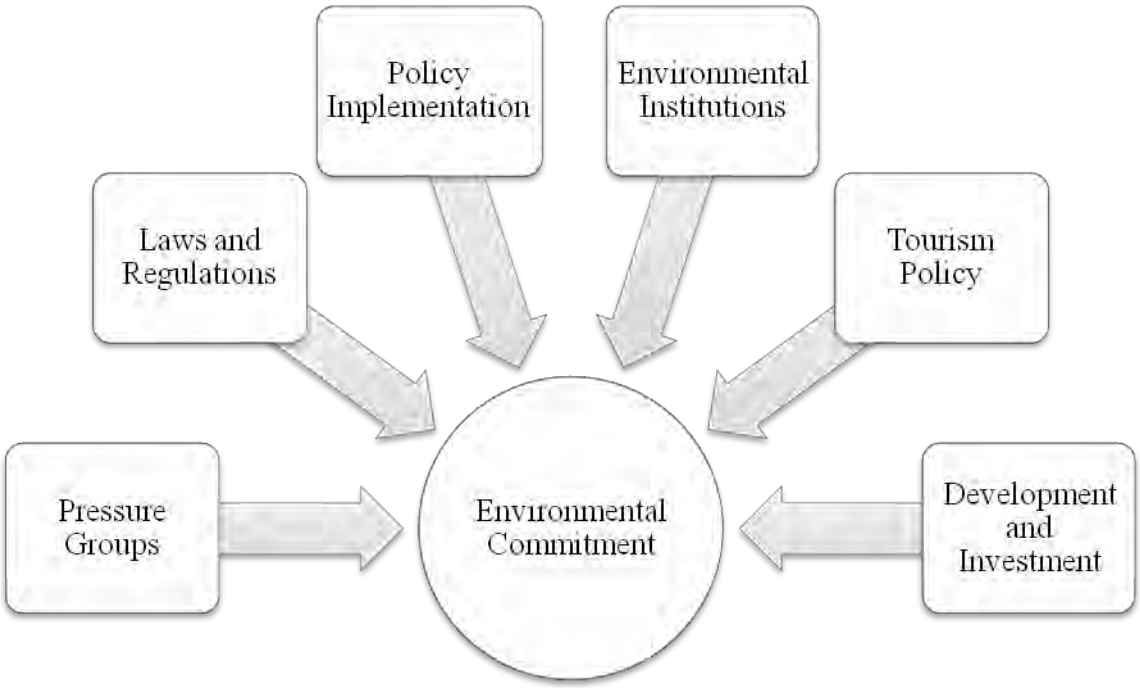
The health of coral reefs is sensitive to numerous factors including water temperature and water level, and it requires clear, unpolluted, oxygen-rich water (Informant Interview 16 2008). The natural system that enables the growth and sustainability of coral reefs is threatened by human activities such as construction, inadequate sewage disposal and tourist activity, such as walking, scuba diving and collecting coral parts (Holden 2000). The greatest threats to the Red Sea coast are urbanization and tourism followed by oil exploration and transport, and industrial pollution (Crosby et al. 2000).

There has been an increased interest in scuba diving in the Egyptian Red Sea as it is considered to be one of the best scuba diving locations (Ibrahim and Ibrahim 2003). The recent large-scale scuba diving activity has resulted in many broken corals especially within the first 10 meters depth resulting from divers walking from the shore to the reef (Jameson et al. 1999). Scuba diving and general activity in and around the coral reefs that involves walking on the shore and ocean floor result in trampling of corals. Thus, corals are quickly destroyed once they have been exposed to tourist activity. A study conducted by Woodland and Hooper (1977) on the effects of trampling on the Wistari Reef off of Heron Island in Australia found that 12% of the coral was broken on the first traverse. On the second traverse, another 14% was damaged, and another 36% was damaged with after the 3rd to 10th exposures. It is safe to assume that a single coral reef in an attractive area in the Red Sea is exposed to over 10 traverses in a single day during most of the year. Thus the amount of damage caused by trampling is considerable. Additionally, souvenir collection has contributed to the degradation of coral (Crosby et al. 2000).

Furthermore, construction of resorts releases dust which has suffocated many coral areas. The sensitivity of coral is reflected in the amount of damage: 90 percent of all existing coral

reefs globally have been damaged by human activity. And with the recent tourism growth in the Red Sea region, it is not surprising that in Egypt, it is estimated that 73 percent of the coral has been damaged as a result of construction (Holden 2000). It is thus evident that once a coral reef is exposed to human activity, it quickly degenerates.

Figure 4.1 Major Determinants of Environmental Commitment in Egypt



4.3 Egyptian Environmental Policy

4.3.1 The History of the Egyptian Government and the Environment

Today the level of commitment to the environment in Egyptian tourism policy, planning, and execution is determined by a number of factors outlined in Figure 4.1. This is the result of a series of environmental authorities and regulations which have been created over the past 25 years to address growing environmental concerns regarding tourism in Egypt. They were created with the intention of controlling tourism growth in and along the Red Sea coast, among other ecologically sensitive areas. The Red Sea is the main concern due to its deteriorating natural

environment, which is primarily a result of poorly planned hotel and resort construction in the region (El Sherbiny et al. 2006).

The first attempt to preserve the environment came with the establishment of the Environmental Control Act of 1983, almost ten years after economic liberalism and the consequential expansion of marine and coastal tourism. Although the Environmental Control Act of 1983 was created as a response to concerns about the impact of coastal projects on marine ecosystems, it did not allow the government to establish a set of qualifications for environmental impact assessment (EIA) analyses in projects of all sectors (Frihy 2001). It thus called for the need for another party to address EIA. In the tourism sector, this issue was addressed with the establishment of the Tourism Development Agency (TDA) in 1992. Today the TDA functions as the main planner and supervisor of tourist development processes in new natural regions.

In 1994, the Egyptian environmental law, Law Number 4, was issued with the establishment of the Egyptian Environmental Affairs Agency (EEAA), the major environmental authority in Egypt today (Helmy 2004). Law Number 4 covers three general environmental sectors: land, water and air, and provides regulations for addressing pollution. The law also requires all proposed projects or expansions to undergo an EIA, which is reviewed by the EEAA before the local government can issue a permit for the project (Frihy 2001). In addition to addressing more current environmental concerns, Law No. 4 of 1994 refers to previously established laws for various tourism operations:

- Law No. 1 of 1973 concerning Hotel Establishments
- Law No. 38 of 1977 concerning the Organization of Tourist Companies
- Law No. 117 of 1983 concerning the Protection of Monuments

- Law No. 1 of 1992 concerning Tourist Establishments

The EEAA, the primary environmental authority in Egypt, was established as a result of the enactment of Law Number 4 of 1994. In 1997, the Ministry of State for Environmental Affairs (MSEA) was set up to work with the EEAA. As stated in the National Environmental Action Plan (NEAP) of Egypt (Arab Republic of Egypt Environmental Affairs Agency 2001), the EEAA underwent restructuring, and is currently responsible for executing the various projects and EIAs decided on by the ministry. The largest and most recent development in the EEAA is the establishment of the NEAP in 2001, which is a 200-page report that develops a plan that addresses environmental issues in Egypt today. It discusses a variety of environmental issues, and the various parties and stakeholders involved, and the need for action. The NEAP's environmental concerns are reflected in its table of contents and in the objectives of the Five Year Plan that are laid out for improving environmental conditions in Egypt, shown in Table 4.1.

Table 4.1 Priority listing of environmental issues in Egypt

Rio Report/Five Year Plan
1. Increasing green space 2. Freshwater management 3. Protecting soils against environmental degradation 4. Marine resources management 5. Environmental map of Egypt's natural resources 6. Air protection in Egyptian cities 7. Management and handling of solid hazardous residues 8. Improving vocational environment

9. Food quality improvement 10. Population and urban and rural development 11. Natural and cultural heritage 12. Mitigating environmental impacts of natural disasters 13. Developing environmental management instruments in Egypt 14. Supporting environmental awareness and people‘s participation

NEAP table of contents
1. Pollution and degradation of natural resources 2. Air pollution 3. Solid waste management 4. Protecting Egypt‘s heritage 5. Strengthening environmental institutions

Source: Gomaa 1997

As mentioned in the NEAP (Arab Republic of Egypt Environmental Affairs Agency 2001), there are a number of authorities involved in environmentally sustainable tourism development including the MSEA, EEAA, the Ministry of Tourism, and TDA. International organizations that also invested in the issue include USAID, UNDP and the World Bank, and represent external pressure placed on Egyptian authorities. As a result of the multiple authorities involved, environmental responsibility has become inefficiently allocated and unclearly divided, resulting in confusion and lack of completion of tasks that are essential to the environmental sustainability and protection of tourism in Egypt. According to the National Programs of Action document, the NEAP aims to support the environmental planning process in a manner that coincides with sustainable development. It establishes programmes and projects that address

several environmental issues. The main objectives of the NEAP as stated in it (Arab Republic of Egypt Environmental Affairs Agency 2001) are to establish a comprehensive system of coastal zoning and to achieve sustainable use of coastal and marine resources.

4.3.2 National Environmental Action Plan (NEAP)

The NEAP and Environmental Protection Law of 1994 comprise the government‘s efforts to respond to increasing environmental concerns. The NEAP was formed with assistance from the World Bank (WB) in 1992 with the objective of evaluating all of Egypt‘s environmental problems and laying out a plan to address them.

4.3.2.1 Initiation

The plan was initiated as a result of growing concerns of limited resources and an expanding population, inadequate national finances to address these problems, and the need for external aid, and to take advantage to of the WB‘s new policy on integrating environmental management and development, for which it had allocated 2 billion USD for assisting developing countries (Gomaa 1997).

4.3.2.2 Limitations

The NEAP is often criticized for not accounting for many of Egypt‘s specific characteristics such as its poverty, pollution and overpopulation. Gomaa (1997:41) refers to it as ―...more like a shopping list of projects to be presented to donor countries than a National Environmental Plan to solve the country‘s basic problems”. In fact, the NEAP lacks an in-depth assessment of financial planning for the suggested projects, and does not prioritize the proposed environmental concerns. This view is shared by the national coordinator for the NEAP who asserts that the NEAP should not be described as an action plan, but rather as an environmental policy report that can be useful in preparing in action plan (Gomaa 1997). Furthermore, the proposed action plan was to be undertaken solely by the EEAA although it involves integrated

policy actions which require involvement of other stakeholder and government. Additionally, the NEAP was only drafted in English rather than in Arabic, the national language, thus enforcing suspicion that it targets the international donor community.

4.3.2.3 The NEAP and Tourism

These limitations of the NEAP are prevalent in tourism-related environmental phenomena and their consequences. The plan considers tourism to accelerate environmental problems caused by human activities as a result of increased pressure on limited resources. Specifically, sewage discharge, spillage and waste management are mentioned. Hurghada, Sharm El-Sheikh and the Gulf of Aqaba are considered the most environmentally threatened by tourism due to their rapid tourism development and fragile ecosystems. The most threatened resources are considered to be coral reefs for which both tourism and endemic populations of sea urchins, malleus and the crown of thorn starfish are blamed.

4.3.3 Environmental Protection Law

The creation of the Environmental Protection Law and Environmental Affairs Agency is the Egyptian government‘s response to a need for increased environmental consideration. The EEAA is the main coordinator and executor of the Environmental Law. The Egyptian Environmental Protection Law, also known as Law No.4 of 1994, is the overseeing Environmental Law. It established the EEAA as the main environmental authority, and the Environment Protection Fund to be established in the EEAA which is to be allocated towards fulfilling the objectives of the law (Gomaa 1997).

The main objective of the Environmental Law is to protect the environment from human-induced deterioration by industry, construction, tourism and waste disposal among other factors. In order to achieve this, the environment is divided into three categories: land, water, and air.

Each is addressed individually. Since its original inception in 1983, the EEAA has been restructured twice to accommodate its increasing role in society (Gomaa 1997).

4.3.4 Egyptian Environmental Affairs Agency (EEAA)

4.3.4.1 History of EEAA

The Environmental Affairs Agency was established in 1983. However the need for an overseeing environmental authority was recognized as early as 1970 by Dr. Mostafa Tolba, an Egyptian scientist who later became the executive director of UNEP.

The Egyptian Environment Law, established in 1994 declares the role of the EEAA in Article 2:

> An agency for the protection and promotion of the environment shall be established within the cabinet premiership under the name the "Environmental Affairs Agency". The Agency shall have a public juridical personality and shall be affiliated to the competent Minister of Environmental Affairs. It shall have an independent budget and its head office shall be located in Cairo. The Minister for Environmental Affairs may establish branches for the Agency in the governorates by ministerial decree, priority to be given to industrial areas.

The EEAA's major task is to formulate the general national environmental policy, its planning and promotion, and to oversee implementation. It is also responsible for strengthening environmental relations between Egypt and other countries, and with regional and international donor organizations.

4.3.4.2 Criticism of EEAA

The original plan for the Environmental Law was to establish a strong central authority to oversee all environmental aspects. It was recommended that it be given the name "Central Environmental Agency" putting it in line with Egypt's other three powerful central agencies (Central Agency for Public Mobilization and Statistics, the Central Agency for Organization and Management, and the Central Agency for Accounting) (Gomaa 1997). However, wanting to limit the organization's power and authority and because, contrary to the initial plan, the EEAA was under the Minister of Administrative Development and Environmental Affairs rather than the

Prime Minister, the ineffectual name –Environmental Affairs Agency" was agreed upon (Gomaa 1997).

4.3.5 Environmental Impact Assessment

During the development of the Environmental Law, there was significant debate in the People's Assembly surrounding the need for and consequences of EIAs (Gomaa 1997). In a country striving to eliminate bureaucracy and encourage investment, requiring EIAs was seen as another barrier that would need to be overcome by potential investors and would increase development costs.

The requirement of an EIA was eventually passed due to pressure from NGOs, international donor agencies and the desire to have a modernized image in the international community. Also, Egypt wants to maintain an appearance of sincerity in its environmental commitment.

The EIA process is now as follows: (1) the competent administrative authorities or licensing authority assess the environmental impact of the proposed project and sends it to the EEAA; (2) the EEAA expresses its opinion on the EIA and proposes any required changes within 60 days from the day the EIA was received; (3) if the EEAA does not give an opinion on the project within this time frame, the project will be considered to have been accepted by the EEAA (EEAA 1994).

There was a substantial increase in the number of EIA studies received by the EEAA in 1999 (Table 4.2). This is contrasted with the number of employees working in the EIA department at the EEAA, which did not grow at a proportional rate (Table 4.2), raising concerns

that some EIAs may have been passed because the EEAA did not have time to attend to them, or may not have adequately examined them, although this suspicion was not confirmed.

Table 4.2 Number of Employees and Studies in the EIA department at the EEAA

Year	Number of employees	Approximate Number of EIA studies
1994	2 (part time)	0
1997	3 (full time)	100
1998	10 (full time)	200
1999	15 (full time)	11,000

Source: Adapted from Abul-Azm and Hassanein 2003

4.3.6 Ministry of Tourism and the Environment

The Ministry of Tourism (MOT) holds the belief that tourism can and should benefit the environment if practiced in a sustainable manner by promoting eco-destinations and raising awareness. The overarching attitude is that the environment is an asset that must be utilized, and that failing to use it for tourism and economic purposes is equivalent to not having it at all.

The Ministry of Environmental Affairs shares this attitude with the MOT and, according to the NEAP, income from tourism is seen as essential for maintaining and protecting environmental resources on which tourism relies. However, there is no evidence to suggest that any tourism income has been directly re-invested in regenerating environmental resources as most environmental financing in Egypt comes from NGOs and international aid.

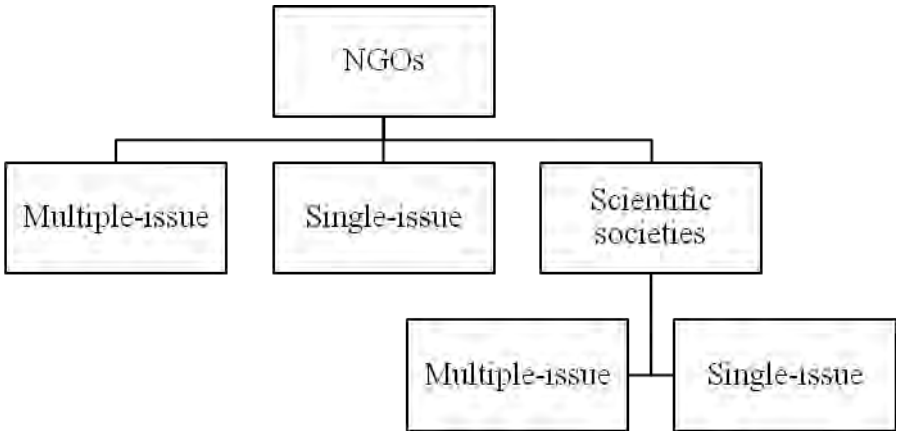
The MOT now recognizes that there is substantial irreversible damage to the environment in regions allocated for tourism development, especially on the Mediterranean coast in the north and the Red Sea coast to the east.

4.4 Other Environmental Pressure Groups

4.4.1 NGOs

The role of NGOs in Egypt is increasing, and the late 1980s and early 1990s saw a rapid growth in the number of ENGOs in Egypt. Today there are approximately 15,000 NGOs in Egypt (Ibrahim and Ibrahim 2003). See Appendix D for a list of some Egyptian ENGOs. Gomaa (1997) categorizes the types of NGOs in Egypt by the scope of their agendas into multiple-issue, single-issue, and scientific organizations, shown in Figure 4.2. Each of these will be discussed in turn in the following sections.

Figure 4.2 Types of NGOs



4.4.1.1 Multiple-Issue

The most prominent Egyptian ENGOs today are the Friends of the Environment Association (FEA), Association for the Protection of the Environment (APOE), and the Arab Organization for Youth and Environment (AOYE). FEA was originally established in Alexandria in 1990 and later in Cairo in 1992. AOYE was originally part of the national *Al-Ahram* Newspaper Science club, which came together in 1978 and later became an NGO in 1990. APOE was established in 1989. These organizations are all multiple-issue organizations with similar

agendas surrounding environmental protection and promoting environmental awareness (Gomaa 1997). Appendix D contains a list of the Egyptian ENGOs.

4.4.1.2 Single-Issue

Single-issue NGOs are also prominent (Gomaa 1997). They are generally smaller in size than multiple-issue NGOs. The Hurghada Environmental Protection and Conservation Association (HEPCA) which will be examined, the Association for Environmental Health and Environmental Development (AHED), and the Association for the Protection of the Environment (APE) are examples of this type of NGO. These organizations target specific issues such as solid waste management (APE), health and environment relationships (AHED) and marine conservation in Hurghada (HEPCA).

4.4.2 Scientific Societies and Research Institutes

The main difference between scientific societies and research institutes and other NGOs is that their members are researchers and scientists, and may be required to have specific academic degrees. For example, having a PhD is a requirement for joining the National Society for Environmental Protection. There are twenty scientific societies and research institutes in Egypt, all of which operate from Cairo with the exception of three (Gomaa 1997). Some of these organizations are multiple-issue, such as the National Society for Environmental Protection, while others are single-issue, such as the Egyptian Society for Marine Sciences and Technology.

4.4.3 The Green Party

The Egyptian Green Party was established in 1990 with very limited financial resources. Due to their financial problems and internal disagreements, the party has never had a very influential role in Egypt. Its activities are mainly launching environmental awareness campaigns, and its major achievement has been to ensure the activation and enforcement and of the Egyptian

Environmental Law No. 4 of 1994. In 1995, its activities were forced to come to a halt as result of growing financial problems. It resumed activity in 1998 mainly focusing on garbage collection and raising environmental awareness (–Egyptian Green Party" 2006).

Unlike most green parties whose members are usually young, educated and liberal to radical in political orientation, the Egyptian green party is mostly composed of older, conservative scientists and academics (Gomaa 1997). The party has failed to gain popular support, and most Egyptians are unaware of its existence. This is a result of its lack of financial capability which hinders it from promoting itself, publishing a newspaper, or carrying out projects. Furthermore, it cannot accept money from UNEP, international NGOs or other Green parties as Egyptian legal requirements prohibit opposition parties from accepting foreign aid (Gomaa 1997).

4.4.4 Conclusion

The Egyptian environmental policy is shaped by a number of state and societal organizations. For instance, ENGOs participated in forming the NEAP, redrafting the Environmental Protection Law, and in lobbying for the environment in the People's Assembly (Gomaa 1997). However, the true success of Egypt's environmental policy is determined by its implementation and ultimately, how well the environment is cared for.

From this analysis, it is apparent that NGOs are effective pressure groups that do influence environmental protection; and that even if the government assumes environmental responsibility merely to support other symbolic or political agendas, a substantial level of environmental commitment can be achieved from the society. Accordingly, environmental pressure groups should catalyze the growth in environmental awareness at the grassroots level in order to build

the strength of ENGOS, and thus pressure the state and ultimately improve environmental commitment in Egypt.

4.5 Tourism Policy

Tourism has become a leading source of income for the Egyptian economy and a key employment generator. Financial gain is central to Egypt‘s tourism policy (Helmy 2004). Bearing in mind that Egypt is a developing country struggling with high unemployment, foreign debt, overpopulation, and investment and development challenges, it can be expected that tourism sustainability is not first on the agenda. In fact, sustainability is addressed primarily due to external pressures (Helmy 2004).

4.5.1 Policy Structure

Egyptian tourism policy incorporates sustainability as a general objective. There are five inherent problems which hinder the achievement of sustainability in tourism: (1) the general objective of sustainability fails to attend to more specific objectives in different aspects of sustainable tourism; (2) there is an absence of sub-policies to link the main tourist policy and the required strategies for sustainability; (3) there is an absence of accountability of a specific authority to deal with all of the issues that pertain to specific conservation issues; (4) a lack of harmonisation and integration of sustainability and protection policies between authorities; and (5) inadequate and insufficient strategies as a result of the above concerns (Helmy and Cooper 2002). There are however, two main constraints which hinder the ability of the Egyptian tourism strategy to overcome these problems. Lack of funds is a major concern and, as a result, only urgent tasks are addressed. Furthermore, there is a shortage of skilled personnel especially in the fields of impact evaluation, site planning and cost-benefit analysis (Helmy and Cooper 2002).

In another study, Helmy (2004) finds that the Egyptian tourism planning process addresses sustainability in a hierarchical and systematic fashion that does not incorporate stakeholder cooperation due to a lack of tourism sub-policies requiring this. There is a lack of collaboration and communication in the creation of national, regional, and local plans and projects. This results in repetitive or contradictory agendas. For example, the World Bank has agreed to fund a project for solid waste management in Hurghada, while a private NGO called HEPCA (Hurghada Environmental Protection and Conservation Association) is working on a similar project, while they have worked together in coral reef conservation (Key Informant Interview 1, 2008). At the same time, the MOT constantly seeks to increase tourists to all destinations including heavily visited destinations such as Sharm el Sheikh and Hurghada, while the EEAA plans to implement capacity limits.

4.5.2 Intergenerational Versus Intra-generational Equity

In the analysis of intergenerational equity the regeneration rate of natural areas should be accounted for. For instance, the rate at which a coral reef is restored depends on several factors including the type of coral, its height, weight and width, the season, and how damaged the reef is (Loya 1976). A relationship that is overlooked by Egyptian authorities is that tourism along the Red Sea Coast is dependent on the uniqueness of the environment and, unless these resources are protected, the very feature that draws tourists to the area will no longer exist (Hassan 2000).

In terms of equity, Helmy (2004), in a study on sustainability in tourism planning in Egypt, concludes that intergenerational equity (balancing the interests of the current generation with those of future generations) is unattainable as policy emphasis is on intra-generational equity (distributing resources towards the poor). This is to be achieved by continuous tourism growth and development into new regions such as the southern Red Sea coast, with the aim of

employing a workforce from surrounding rural villages. The study finds the concept of intergenerational equity to be ―obscure in the tourist policy objectives, strategies, plans and techniques" (Helmy 2004: 496) mainly because the needs of present generations have yet to be met. This prioritization is reflected in the Egyptian Hotel Association (EHA) objectives, shown in Table 4.3, which promote intra-generational and intra-regional equity rather than sustainable development and intergenerational equity.

Table 4.3 EHA Board Objectives

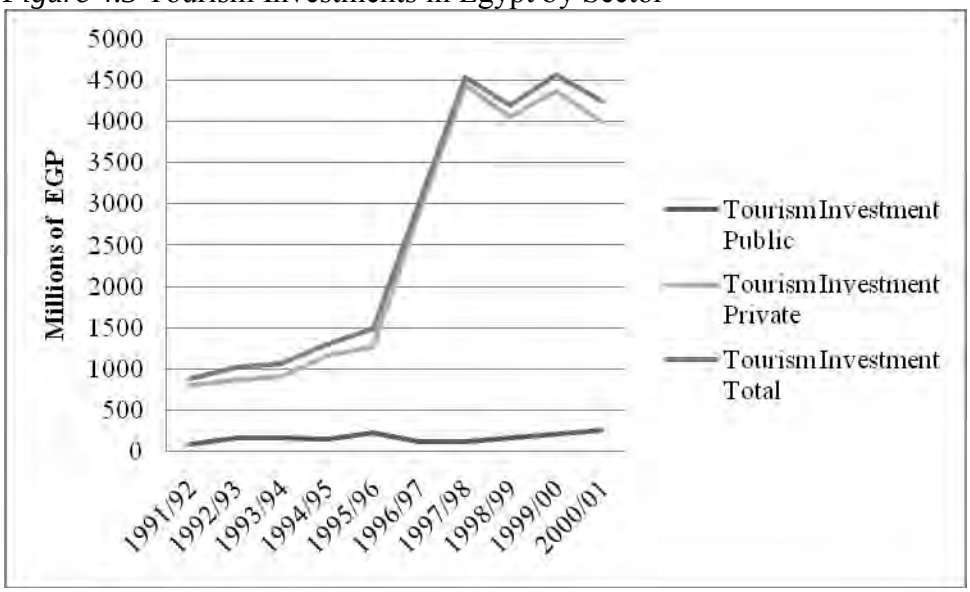
EHA Board Objectives
• Participating positively in studying and issuing legislations related to the hotel industry. • Promoting tourism marketing plans, as well as assisting the 2 and 3-star hotels in getting their fair share of these plans during International Trade Fairs. • Establishing a pricing policy with the aim of ensuring a fair market share to all hotel categories. • Preparing detailed feasibility studies to determine investment opportunities in the hotel industry, and defining growth rates and expansion in hotel capacity. • Playing a more active role in reconciling members, whenever any dispute between owning and managing companies, or between hotels and travel agencies arises. • Participating in evaluating training programs, and playing an active role in cooperation with the Egyptian Tourism Federation, in the implementation of these programs. • Establishing and implementing local media plans in order to generate a supportive public opinion towards the obstacles and requirements of the hotel industry. • Solving hotel problems that require urgent solutions.

Source: ―EHA Objectives" 2008

4.5.3 Tourism Growth and Expansion

Increasing the number of tourists has been foremost in the MOT policy for decades. This is reflected in large volumes of investment in tourism which have resulted in steadily increasing tourism growth since the 1980s (Helmy and Cooper 2002). Figure 4.3 graphs the growth in Egyptian tourism investment from the public and private sectors, and in total over the ten year period from 1991 until 2001. The diagram reflects growth in the private sector especially from 1995 until 1998. During this three-year period, money invested in tourism tripled from 1500EGP to 4500EGP from private sector investment.

Figure 4.3 Tourism Investments in Egypt by Sector



Source: Adapted from Arab Republic of Egypt Ministry of Planning 2001

More recently, according to the ARE Country Strategy 2000-2002, the Ministry of Tourism is seeking to diversify tourism in Egypt by expanding sun and surf tourism in the Red Sea as its major priority. Becoming a central player in the international conference circuit is also of importance to Egypt. International gatherings are often hosted on Red Sea cities, especially in Sharm el Sheikh, where many conferences have been held, including the most recent World Economic Forum in July 2008. Specific areas that are designated for further tourism development are Al Arish, Ras Mohammed, Sharm El Sheikh, Taba and Hurghada, all of which are situated on the Red Sea. Tourism development in these regions is based on improving and expanding travel offerings, and enriching tourist activities by adding new entertainment and sport facilities. Such proposed expansions threaten the environment and, thus, tourism sustainability.

4.5.4 Goals and Indicators

The ARE Country Strategy for 2000-2002 is a 54 page document that discusses the government‘s issues and priorities in development. In terms of tourism, the goals and indicators are addressed as follows:

> The government is working to further stimulate the tourism sector, which contributed 4.0 percent of GDP in 1997 and is a major foreign exchange earner. The sector employs more than half a million people. Incoming tourists increased from 1.4 million in 1982 to 4.3 million in 1999, and the number of tourist nights was 25.7 million in 1999 after it had almost tripled from 9.3 million in 1982 to 26.8 million in 1997. Egyptian tourism, which is largely private sector dominated, is experiencing a significant breakthrough and is gearing up for the competition, especially from new, lower cost tourism markets opening up in Eastern Europe (Arab Republic of Egypt 2000:7).

It is interesting to note that the indicators that are used are consistently the number of tourists and the nights spent as tourists, rather than economic, financial or other measures. This is reflective of the Ministry of Tourism‘s attitude towards measurement of tourism development, and the indicators of their goals.

4.5.5 Tourism Constraints

The major constraints to tourism development are laid out as follows in the ARE Country Strategy (2000-2002):

> Realising the potential of the sector depends on further development of the transport and public utilities sectors and, perhaps on the security situation, in certain parts of the country. There are also threats to the tourist treasures, which include sulphur dioxide emissions leading to accelerated deterioration of limestone monuments (pp.18).

Tourism itself is not mentioned as one of the threats, which is reflective of the government position of wanting to further increase tourist numbers.

4.5.6 Pricing

In destination pricing, there are three categories of pricing objectives (Vanhove 2005). Pricing can be profit-oriented, sales-oriented, or *status quo*-oriented. Profit-oriented pricing aims

at maximizing profits, sales-oriented at sales volumes, and *status quo*-oriented is a competitive pricing strategy, which relies on closely matching competitor prices.

The Egyptian tourism pricing policy follows the sales-oriented pricing objective. The focus is on increasing and maintaining high numbers of tourists. Tourism success is accordingly measured by number of tourists rather than tourism income, which is characteristic of the profit-oriented pricing objective.

4.5.6.1 Price as a Competitive Advantage

The ministry of tourism emphasizes the need to keep prices low to attract tourists from competitor destinations. Some Mediterranean competitor destinations are Greece, Italy and Turkey. These four countries share the similar main attractions and are located in a relatively close proximity to one another. They rely mainly on warm climates, beautiful sandy beaches, and historical attractions.

4.5.6.2 Egypt and Other Competitive Destinations

A study conducted by Baloglu and Manaloglu (2001) that compares perceptions of these destinations found that Egypt routinely had the lowest score of the four countries in many of the image items, and scored the highest on only three characteristics, as shown in Table 4.4.

Table 4.4 Egypt‘s tourism competitive strengths and weaknesses

Strengths	**Weaknesses**
Good value for money	Beautiful scenery and natural attractions
Interesting cultural attractions	Great beaches and water sports
Interesting historical attractions	Quality of infrastructure
	Unpolluted and unspoilt environment
	Good nightlife and entertainment
	Standard hygiene and cleanliness
	Interesting and friendly people

Source: adapted from Baloglu and Manaloglu 2001

The reason for this could be that Egypt is the poorest of the four countries (see Table 4.5) giving it a competitive disadvantage. However, some of the image items such as natural attractions, great beaches, unpolluted environment and interesting and friendly people are arguably not directly dependent on national income.

Table 4.5 GDP of Egypt and Mediterranean competitor destinations

Country	**GDP at current market prices, millions US$ (WB estimates) for 2006**
Egypt	107,484
Turkey	402,710
Greece	244,951
Italy	1,844,749

* *Source*: ―National Accounts” 2008

This study reflects Egypt‘s dependence on low price, and historical and cultural attractions rather than the quality of its beaches and nature tourism. This finding is odd considering that Egypt has among the world‘s best diving sites (Ibrahim and Ibrahim 2003), and

most of its tourism development has been concentrated in coastal regions, reaching 90% in 1999 (Shackley 1999). This suggests that although Egypt has managed to attract tourists to its nature tourism destinations, this expansion is not as successful as it should be considering its potential. Its performance is much better at planning its traditional cultural and historical attractions than it is at nature tourism. This may be a result of experience, but it also raises the concern that, contrary to common belief in the Egyptian Ministry of Tourism, Egypt's poorly planned tourism growth is not only reflected in the degradation of its natural resources, but also in relatively low tourist satisfaction. Mihalic (2000) finds that tourists with lower purchasing power and lower environmental awareness are attracted by lower prices and are not so demanding in terms of environmental quality. Egypt's policy of maintaining a competitive advantage based on pricing is thus affecting the quality of the tourist experience, the types of tourists that are attracted, and these have a negative impact on preservation of the natural environment.

Table 4.6 Price per Person per Night at the Holiday Inn for a Standard Room

Location	**Price/night (USD)**
Safaga, Egypt	55
Sharm el Sheikh, Egypt	81
Eilat, Israel	122.64
Siracusa, Italy	149.80
Thessaloniki, Greece	179.75
Izmir, Turkey	198.21

Source: "Reservation Desk" 2008

4.5.6.3 Reasons for Low Pricing

The MOT is keen on maintaining a low pricing strategy, especially relative to its international competitors. The purpose of this is to create a competitive advantage and, thus,

attract a larger number of tourists. However, there are also a number of other factors that help to shape this pricing policy.

The value of the Egyptian pound (EGP) has been steadily depreciating since the 1990s. As a result, although the price of tourism accommodation and services in Egypt have not necessarily decreased in price in terms of EGP, they have decreased in price in other foreign currencies, such as the USD (Figure 4.4), making Egypt a lower-cost destination.

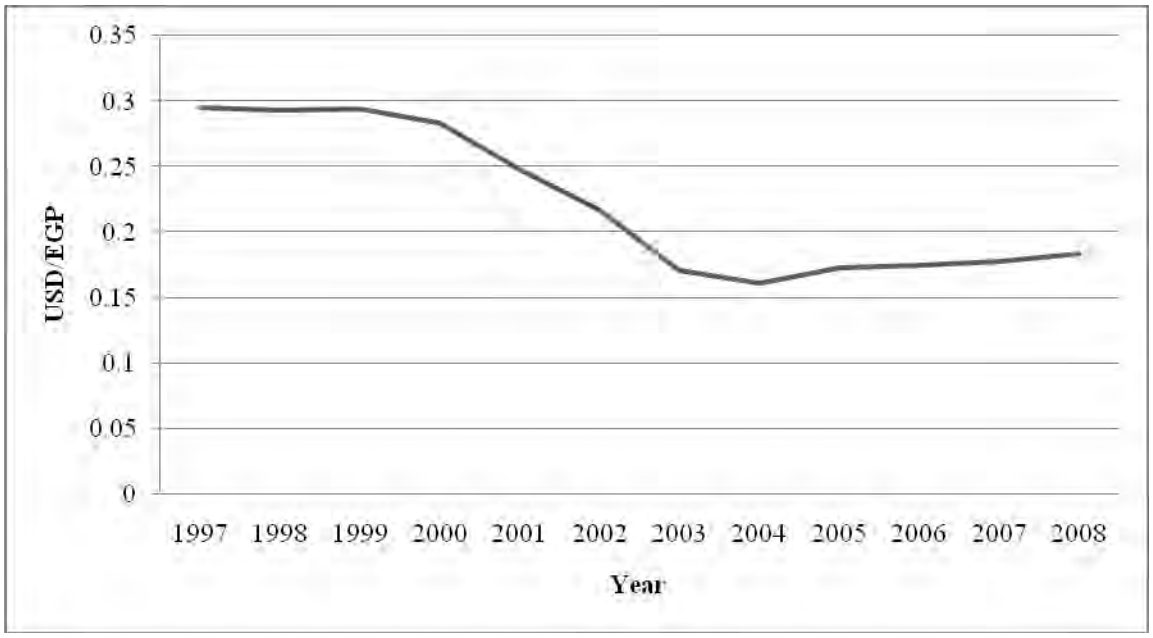


Figure 4.4 Depreciation of EGP as compared to the USD.
Source: Atweiler 2008

Additionally, hoteliers wish to operate at full capacity year-round, including in non-peak seasons. As a result, they often decrease prices until they operate at near break-even prices in order to maintain high occupancy. This is also in line with the constant pressure from external travel agencies to keep prices low.

4.5.6.4 Consequences of Low Price Policy

Although Egypt‘s pricing policy may be largely responsible for the increasing numbers of tourists, there are negative consequences of implementing a low pricing strategy. These commonly include: (adopted from Laarman and Gregersen 1996):

- Lower revenue for public and private sectors
- Little indication that nature has a financial value, and a low value is reflected by the price visitors must pay
- Low prices require subsidization from outside sources to maintain the environment (as is the case with subsidization from USAID, CIDA, DANIDA, WB, UNEP, UNDP, ODA (Gomaa 1997).
- High fees can relieve crowding, thus reducing stress on the natural environment without necessarily negatively impacting revenue.
- ―Among recreation managers, a frequent assumption is that nature-based tourism visitors are more respectful of their surroundings if they have to pay for them. Those arguing this position assert that vandalism, littering and other negative behaviours decrease when visitors pay for use. This proposition merits more study than it has received to date, especially in a cross-cultural international context" (Laarman and Gregersen 1996:249).

4.5.6.5 Price as a Quality Indicator

Most consumers consider price to be their best measure of quality, especially when there are no other available indicators of quality (Ziethaml 1988). In fact, because pre-visitation perceptions of quality are not based on actual tourist experiences, evaluation of the quality of a destination prior to visitation has little to do with the destination and more to do with its marketing and promotion (Ziethaml 1988).

Overall, the use of price as an indicator of quality depends on (Ziethaml 1988:12):

(a) Availability of other cues to quality,

(b) Price variation within a class of products,

(c) Product quality variation within a category of products,

(d) Level of price awareness of consumers, and

(e) Consumers‘ ability to detect quality variation in a group of products.

Price is not solely based on monetary price, but includes everything that the consumer sacrifices to obtain a product (Ziethaml 1988). In Egyptian tourism, hygiene, safety, pollution and infrastructure may be considered to be part of the price that tourists pay, giving Egypt an overall disadvantage although it has competitive monetary prices. Increasing tourism prices in Egypt may serve to improve the overall quality of the experience.

A destinations‘ attributes, which are comprised of attractions and infrastructure largely determine the satisfaction level, and thus influences tourists‘ willingness to pay (Laarman and Gregersen 1996). For nature-based tourists who chose to engage in nature-based sports, adventure and recreation, the price they have to pay is frequently lower than the price they are willing to pay (Laarman and Gregersen 1996). This problem is common among many governments, especially those struggling with fiscal problems such as that of Egypt (Laarman and Gregersen 1996). In economic theory, when the price is lower than the consumer‘s willingness to pay, the surplus is captured by the tourists, and is lost by the national government and local businesses (Brown et al. 1997). Tourists can be fairly supportive of price increases when they are accompanied by quality improvements.

4.6 Price Strategy Consequences on Egyptian Coastal Tourism

4.6.1 Types of Tourists

Contrary to the MOT, the EEAA is interested in the types of tourists coming to Egypt. They are concerned that Sharm el-Sheikh and other Red Sea and Sinai coastal cities initially drew educated, eco-friendly visitors (Key Informant Interview 2, 2008). The ETA was active in investment in and promotion of the region. This was reflected not only in an increase in hotels and resorts, but also in nightclubs, casinos, bars and other forms of entertainment unrelated to the main coastal and marine attractions. This attracted a different segment of tourists than those initially interested in the region. These tourists are from lower income countries, and are not necessarily interested in the environmental value of the region, but rather are concerned with sea, sand and sun. Having little initial interest in the ecological value of the area, they show no interest in protecting it.

4.6.2 Tourist Purchasing Power

In order to determine the overall change in the average per capita income of tourists as a whole while maintaining consideration for the number of tourists from each country, the per capita income of each country was multiplied by the number of tourists from that country, and the results added up for all of the countries for both years. The result showed an average tourist income of $26,004.93 in 2006, and $23,485.95 for 2007. This represents a 9.7% decrease in the average tourist income from 2006 to 2007, and supports the EEAA concerns regarding changes in the types of visitors to Egypt.

4.6.3 Marketing Position

One of the main reasons for attracting lower-income tourists is because Egypt has positioned itself as a low-price destination. This is partially for gaining an advantage over its

more expensive competitors in an effort to generate steady income from tourism even during low seasons. Shaalan (2005) asserts that international tour operators have a large influence on the pricing as they exert pressure on Red Sea resorts to maintain a minimum percentage of occupancy year-round. Competition between resorts further decreases their price negotiating power and further drives prices down. Such is the case that according to one source at the EEAA, hotel prices per night at a 4-star hotel reached US$8 per night. It was expected that the MOT would set a floor price for hotels, although no such steps were taken for fear that it would drive revenues down and discourage investment in the region (Key Informant Interview 4, 2008).

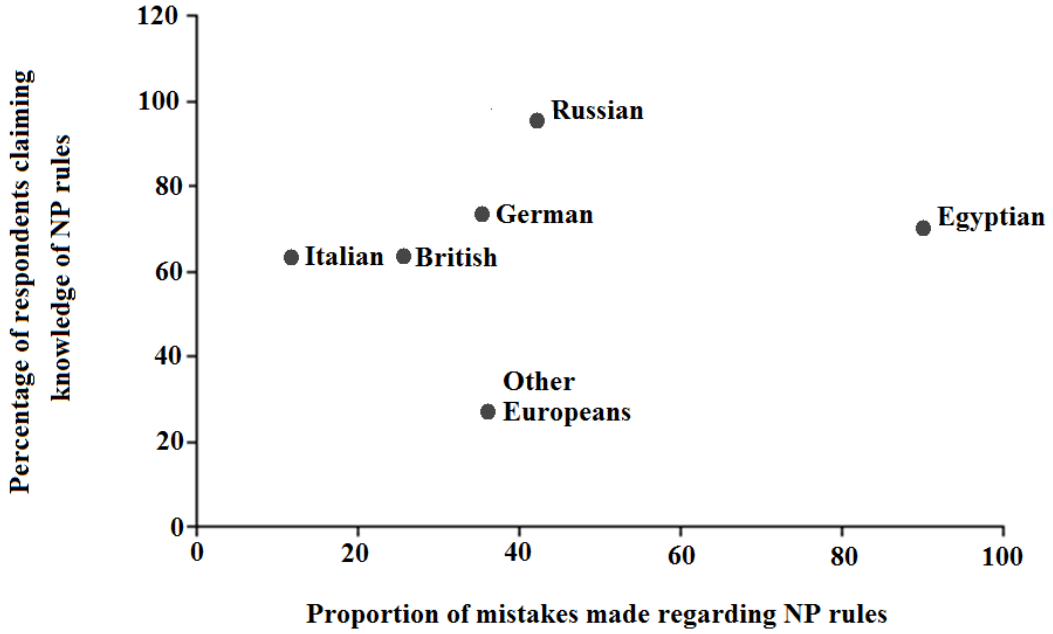
4.6.4 Activity

This shift in the types of tourists is reflected in the nationality of tourists to Egypt. Germans are considered to be one of the most favoured tourist groups by the EEAA as a result of their high education, purchasing power, and level of environmental awareness. In contrast, Russians are considered to be least favoured due to their relatively low purchasing power, education, and poor environmental awareness. They are seen as having no environmental concern and as being merely interested in ―sun and fun" (Key Informant Interview 2, 2008). The term nature-based tourism refers to travel that is ―motivated totally or in part by interests in the natural history of a place, where visits combine education, recreation and often adventure" (Laarman and Gregersen 1996: 247). According to this definition, most of the tourists to the Sinai and Red Sea regions are not nature-based tourists but are ‗sun and fun' seekers. This view is shared by USAID, which is a large contributor to environmental protection in Egypt, including in the Red Sea and Sinai regions (Key Informant Interview 7, 2008). This finding is supported by Shaalan (2005) who notes that there is evidence of a shift towards mass 3S (sea, sun, sand) packaged tourism, especially in newly developed tourism regions.

4.6.5 Environmental Awareness

Leujak and Ormond (2007) find that in Egypt there has been a shift from experienced divers and snorkelers to inexperienced snorkelers and beach tourists who have limited knowledge of marine and reef biology, and showed less interest in learning about it. They are less sensitive towards heavily impacted sites and crowding on the shore and in the water, and thus have a higher tolerance towards it. This is largely tied to the change in tourist nationality, which according to Leujak and Ormond (2007), and as demonstrated in Figure 4.5 is a determinant of environmental awareness.

Figure 4.5 Relationship between Nationality and Knowledge of National Park Rules



4.6.6 Nationality

There has in fact, been a shift in the major tourist nationalities from German and British, to Italian, then Russian (Leujak and Ormond 2007). This trend is reflected in the change of tourist composition from the year 2006 to 2007. There was a substantial increase in the number of Russian tourists from the year 2006 to 2007, and a smaller increase in the number of German tourists (Tables 4.7 and 4.8).

Table 4.7 Top Ten Nationalities of Tourists to Egypt in 2006

Ranking	Nationality	Number of tourists	Per capita income in US$(2006)*
1	UK	1,033,761	39,207
2	Russia	998,149	6,877
3	Germany	966,386	34,955
4	Italy	786,130	31,440
5	Libya	443,197	8,348
6	Saudi Arabia	388,280	15,045
7	France	372,449	35,375
8	Palestine	228,881	...
9	USA	228,183	43,562
10	Netherlands	210,585	40,535

Sources: Ministry of Tourism, 2007; *(–National Accounts" 2008)

Table 4.8 Top Ten Nationalities of Tourists to Egypt in 2007

Ranking	Nationality	Number of tourists	Per capita income in US$(2006)*
1	Russia	1,516,561	6,877
2	Germany	1,085,930	34,955
3	UK	1,055,012	39,207
4	Italy	983,293	31,440
5	France	464,239	35,375
6	Libya	439,469	8,348
7	Saudi Arabia	412,466	15,045
8	Ukraine	358,969	2,287
9	Poland	335,016	8,801
10	USA	272,523	43,562

Sources: Ministry of Tourism, 2007; *(–National Accounts" 2008)

4.6.7 Failure of Environmental Policy

There are inconsistencies in the theory and practice of environmental policy in Egypt. The principles of the EIA laid out by the 1994 legislation are not applied to the implementation of most tourism development projects (Frihy 2001). This is attributable to a number of factors. The NEAP (Arab Republic of Egypt Environmental Affairs Agency 2001) identifies four hindrances facing environmental policy making. The major obstacle is the multiplicity of implementing organizations, and the consequent need for coordination between them. The previous section on environmental policy initiatives over the past 20 years is reflective of this issue. The other obstacles are lack of up-to-date comprehensive information, which limits the monitoring and decision-making processes, cultural constraints, and weak environmental expertise.

These difficulties are fairly specific, which should make them relatively easy to address. However, they are a result of larger forces that have accumulated as a result of numerous factors that have influenced Egypt‘s history. First of all, environmental awareness was initiated by external forces, and enforced top-down rather than being a grassroots movement (Gomaa 1997). Secondly, Egyptian industries have been rapidly privatized over the past few decades (Gray, 1998) and much legislation has not been adapted to better accommodate current socio-economic conditions. This has resulted in unclear responsibility allocation, which is especially prevalent in environmental issues. Additionally, like most developing countries, development is a priority over environmental protection and sustainability, and although it is possible to achieve both, the way in which development is pursued often contradicts with environmental interests. These issues are discussed next.

4.6.7.1 External and Top-down Initiation of Environmental Awareness

Environmental concern at an authoritative level is relatively recent in Egypt. Among businesspeople and citizens, it still is, to a great extent, an abstract concept. The initiation of environmental consideration is enforced top-down, rather than being a grassroots movement, as been has the case with most developed countries (Gomaa 1997). As well, as the NEAP report asserts, culture is a constraining factor (Arab Republic of Egypt 2001). Even at the national level, environmental concerns were brought to light largely as a result of external pressures in the form of willingness of international institutions to donate money to support environmental causes under the condition that certain environmental standards are met (Gomaa 1997).

Egypt's environmental policy was originally prepared for the United Nations Conference on Environment and Development (UNCED) Agenda 21, held in Rio de Janeiro in 1992 (Abdel Wahaab 2003). Since then, Egyptian authorities have been working towards integrating economic development and environmental sustainability. As a result, the National Environmental Action Plan (NEAP) was created, with assistance from the World Bank in 1992. NEAP is responsible for outlining the government‘s position on environmental protection. Thus, because environmental consideration was not internally spurred, more effort is required in order to stimulate the culture of environmental awareness in Egypt (Helmy 2004). Because the development of environmental legislation was a result of external pressures, environmental regulatory initiatives were created with limited consideration of technical, legal and administrative feasibility. Many crucial aspects were overlooked including environmental costs and risks, existing carrying capacity and pollution levels and social costs (Gomaa 1997).

The environmental program adopted by Egypt cannot be implemented practically using existing environmental policy instruments. The regulatory process is based on pollution

discharge sanctions which are based on international pollution standards rather than being modified to suit the Egyptian case. Further, it is unrealistic to expect pollution levels to drop instantly and, rather than working with a regulatory agency to negotiate a realistic schedule, environmental regulators now inform polluters of a violation, which is often not tied to any provisions for non-compliance (Abdel Wahaab 2003). Coupled with weak environmental expertise and lack of up-to-date comprehensive information limiting monitoring and decision making abilities, regulation based on the amount of pollution is an unsuccessful approach.

4.6.7.2 Poorly Planned Privatization

In the 1970s, tourism was viewed as being a tool to promote economic prosperity as a result of former President Anwar Sadat's Open Door policy (Daher 2007). During this time, tourism promotion in Egypt was largely tied to the economic liberalization movement and, as a result, Egypt has increasingly replaced import substitution policies with an economic management and expansion policy based on the growing role of the private sector (Gray 1998).

The economic liberalization movement resulted in increased private investment in the tourism sector during the mid 1970s. Both local and foreign investors were involved in Egyptian tourism development. International tourism-oriented firms such as American Express set up branches in Egypt during this time; however the industry was largely dominated by the state-owned company, Misr Travel, until the 1980s. In the early 1980s, the newly-appointed Minister of Tourism, Fuad Sultan had significant impacts on the sector as a result of his pro-liberalization approach to tourism development. This resulted in tourism liberalization as he allowed foreign firms to manage and operate previously poorly-performing state-owned hotels. These hotel operators included Hilton, Meridian and Marriott (Gray 1998). It was during this time that impacts of the Gulf war began to resonate on the Egyptian economy in the form of reduced aid

and remittances of Egyptian nationals working in the Gulf region (Sivan 1997). The private sector quickly responded to liberalization policies and, by 1993, almost all tourism investment was undertaken by private enterprise (Gray 1998).

4.7 The Egyptian Government as a Stakeholder

The role of the Egyptian government as a tourism stakeholder has changed substantially over the past thirty years. During the 1950s and 60s, the government owned much of the industry. Today, the sector is fully privatized (Gray 1998). In the process of achieving this, the government, with collaboration from the World Bank, agreed to give the private sector full control over the tourism industry by:

1. Changing the role of the public sector from that of owner/operator to planner/regulator and promoter/facilitator.
2. Deregulating the industry to allow the private sector to operate freely in a competitive environment.
3. Protecting and conserving the unique cultural and natural resources in the tourism areas.
4. Promoting a larger role for the private sector in the design, financing, implementation, ownership and operation of tourism facilities.

(Wahab 1997:143)

It is naive to rely on the private sector to assume full environmental responsibility because they have the opportunity. On the contrary, it is natural to assume that an institution or organization, such as a resort, will use all available resources to achieve its goals (Machan 2001) which may or may not encompass environmental protection. The private sector has proven to be less than altruistic towards the environment. They often underestimate the potential for adverse outcomes when making plans, or find the loss from environmental degradation to be outweighed by potential gains. When problems arise, they are quick to cover up the harm and rid themselves of any responsibility. Adding to this concern, responsibility is diffused within the organizational structure, so there is usually no one individual who can be blamed for a given decision, which facilitates the processes of engaging in environmentally destructive activities (Hamilton and

Sanders 1999).

It is thus essential that the government oversee and coordinate the various stakeholders in tourism to ensure their cooperation and participation in the protection of natural resources. However, in a changing economic structure such as Egypt‘s, various roles have shifted between stakeholders. This is demonstrated in the deregulation of the tourism industry in Egypt that has been taking place over the past twenty years. In a study on environmental management in hotels in Spain, Alvarez Gil et al. (2001) find that lax environmental enforcement discourages stakeholders from pursuing environmental protection. In the newly privatized tourism industry, involving the benefiting parties is essential to sustaining the surrounding natural resources and, unless the government actively assumes its position as the environmental regulator, it is unlikely that the private sector will contribute greatly to environmental protection.

4.7.1 The Egyptian Government and Environmental Planning

Unfortunately however, the Egyptian government has largely failed to recognize the role of private industry in environmental programs. The Egyptian government thus chose to assume the roles of both ―...planner/regulator and promoter/facilitator" in tourism development (Wahab 1997: 143), granting private investors full control over their businesses but requiring no environmental responsibility. It is thus not surprising that developing and implementing effective environmental policies have proven problematic as there are numerous stakeholders involved in tourism development, each with different agendas and often conflicting goals. Consequently,

> ...planners and managers are faced with the challenge of reconciling a number of conflicting and often incompatible demands, including economic development, tourism and recreation, urban expansion and agricultural development, while, at the same time, protecting areas for scenic or ecological value and vulnerable environments against the effects of erosion or flooding (Priestley et al., 1996:154).

Moreover, each organization seeks to achieve its goals and, in doing so, uses all available resources. The government is no exception (Machan 2001). It is often the case that the government is engrossed in attending to economic growth and gaining foreign currency, especially in the case of developing countries like Egypt, and this may be at the expense of the environment. When authoritative figures lay down restrictions to control land usage, there are other agendas that influence the content and implementation of regulations.

4.7.2 Unclear Responsibility Allocation

Very closely related to and arguably a consequence of poorly planned privatization, is the unclear allocation of environmental responsibility between stakeholders. Sustainable development should entail collaboration between environmentalists and decision makers. In many developing countries, including Egypt, the gap in cooperation between decision makers and environmentalists is increasing (Abdel Wahaab 2003). Helmy (2004) argues that one of the main reasons behind the lack of implementation of environmental conservation policies in tourist areas is the absence of sub-policies that link the main tourist policy to its underlying environmental strategies. Abdel Wahaab (2003) agrees that the problem does not lie in the policies themselves, but rather in their implementation.

The Egyptian government, like most other developing country governments, is struggling with various development efforts in many different fields. As different sectors develop at different paces, gaps in policy and implementation arise. Such is the case with environmental issues in tourism development in Egypt. This is reflected in the government failing to recognize the role of the private sector in environmental programs. In a survey conducted by Hamed and El Mahgary (2003) that outlines stakeholders in the Egyptian market that have contributed to cleaner production, the following parties were found to be potentially significant contributors:

- Ministries concerned with industry, environment, trade and investment, finance, economics, education, research, and energy
- Federation of Egyptian industries (FEI)
- Non-government organizations (NGOs)
- Universities, research centres and university associations
- Financial institutions
- Local government agencies
- Local and international consultants

Most of these organizations, however, are underutilized in environmental protection. Engaging them in environmental efforts is the only way to achieve successful environmental protection. Thus, in order for Egypt to sustain its environment, it must shift from a traditional sustainable tourism model that is based on public policy enforcement to a new paradigm that focuses on cooperation and partnership between stakeholders (Hassan, 2000). These linkages and the relationships between them are crucial to environmental sustainability.

Environmental sustainability in tourism is too heavy a burden for the government to carry alone. Therefore, efficiency, equity and harmony between stakeholders can only be achieved through their full participation in tourism planning (de Araujo and Bramwell 1999). An interactive form of governance should thus be adopted based on cooperation between public and private parties (Glasbergen 1998). Although this implies new roles for both the government and for private investors in tourism sustainability, only through collaboration between stakeholders and recognition of mutual concerns can environmentally sustainable tourism be achieved (Jamal and Getz 1995).

4.7.3 Conflicting National Interests/Goals

It is not surprising that implementing effective environmental policies has proven problematic for Egyptian authorities as there are numerous stakeholders involved in tourism development, each with different agendas and often conflicting goals. Reconciling the demands of economic development, tourism and recreation, while protecting the resources upon which these activities rely is a challenge that planners and managers must face (Prietsley et al. 1996). It is often the case that the government is engaged in attending to economic growth and gaining foreign currency, which may be pursued at the expense of the environment (Machan 2001). Even when restrictions are placed to control natural resource usage, environmental consideration is not the only item on the agenda and, if not carefully designed, instruments used to promote different national goals can conflict. In the case of Red Sea tourism in Egypt, the laws and regulations arguably contradict existing economic incentives.

Law Number 4 of 1994, the main Egyptian environmental protection law, relies strictly on coercive enforcement methods, predominantly fines and imprisonment. This form of regulation is often criticized by economists for being expensive to administer, intrusive and generally inefficient. On the other hand, according to Egypt‘s State Information Service (SIS)‘s taxation is an economic instrument which is commonly employed by governments to influence private industry (Egyptian State Information Service 2005). It can be used to provide an incentive or disincentive based on whether it is increased or decreased. In an effort to further expand and develop tourism in Egypt, the government offers tourism business activities a 5-year tax exemption on all profits accrued during that period, and projects that aim at developing desert zones can receive up to 10 years of tax exemption. This can potentially contradict efforts to control existing coastal damage, considering that hotel and resort construction is a significant

contributor to coastal and coral degeneration (El Sherbiny et al. 2006). Therefore, financial incentives used to promote tourism growth and development contradicts the less-successful command-and-control methods used to address environmental sustenance.

4.8 Private Sector Environmental Commitment

4.8.1 Background

There is increasing environmental awareness in the private sector in Egypt. Much of the ocean cleanup is carried out by diving centres that seek to preserve the diving sites upon which their businesses rely. Many hotels and resorts also engage in shoreline marine and city cleanup projects as part of their community involvement. For example, in February 2008 the Hurghada Marriott Resort hotel spent 4 days cleaning garbage that had been left by tourists or had blown onto Magawish Island off the coast of Hurghada (Key Informant Interview 17, 2008).

4.8.2 Waste Disposal and Recycling Projects on the Red Sea Coast

The solid waste management system in the Red Sea coast cannot accommodate the consistent tourism growth resulting in increasing levels of waste from construction and operation of tourism facilities (Engel and Farouk 2005). Waste generated from tourism facilities is often improperly disposed of, posing natural environment health and sustainability concerns, in addition to substantial garbage littering the streets and desert, threatening the aesthetic beauty of the region and future tourism success.

A study on solid waste management from tourism in the Red Sea by Engel and Farouk (2005) yields several relevant findings which apply to all of the coastal cities with the exception of El Gouna, which has successfully implemented a sound waste management initiative. The findings are:

1. All resorts south of Marsa Alam are responsible for independently managing their waste, and use independent trucks to collect, transfer and dump their waste daily in an undesignated dumpsite. The situation is slightly better in the more habituated Red Sea coast, north of Marsa Alam where contractors (such as Clean Home Company, Care Service, and Egyptian Company for Environmental Services) collect waste from resorts daily, and dump it in designated landfills, although some random dumping seems to be occurring as well.
2. Most resorts wish to become involved in reducing waste through composting, recycling, reuse and waste prevention, and many resorts separate their waste with the intention of recycling, although very little recycling does in fact occur due to a lack of recycling services, technical knowledge, and access to markets. Contractors often re-mix waste after they have collected it.
3. Dump sites are poorly selected and managed, and are often no more than a shallow pit designated for waste disposal. Open waste burning is nonetheless common, and waste is scattered around waste sites which are a major source of windblown litter.
4. There is almost no management of construction waste, which is disposed randomly on roadsides.
5. Litter is a major concern both on land and in the water. The private sector has been increasingly participating in cleaning up litter. Hotels and dive centres are informally involved with cleaning up the litter to avoid negative consequences on their operations.

4.8.3 Zoning

According to the Arab Republic of Egypt Environmental Affairs Agency (2006), one of the main tools by which the NEAP plans to achieve sustainable use of coastal and marine resources is through a comprehensive and dynamic process of national coastal zoning.

The first site designated for protection in Egypt was established in 1983 at El Omayed and was acquired by the University of Alexandria. In 1983 environmental offices were established in each governorate in Egypt and, along with the EEAA which was also established that year, were responsible for the management and protection of designated sites (Abd-Alah 1999).

A framework for Integrated Coastal Zone Management (ICZM) was issued in 1996 based on the environmental law (Law 4/94) and is laid out by the _Hurghada Declaration' which resulted from a meeting in Hurghada in May 1995 of 50 national and international experts. ICZM was set up to tackle increasing concerns regarding coastal health, especially regarding shoreline erosion and flooding, irrational land use, water pollution, and deterioration of natural resources and habitats (Abul-Azm et al. 2003).

The EEAA is responsible for formulating the general policy and for preparing necessary plans for environmental promotion and protection, and for following-up implementation of plans (Abul-Azm et al. 2003). This includes plans for the protection of conservation areas, along with the corresponding governorate environmental offices. These institutions are severely limited in both funding and expertise, resulting in poor conservation management of protected areas (Abd-Alah 1999).

4.9 Private Sector Environmental Commitment in the Hurghada Region, Red Sea

4.9.1 Case Study of Private Sector Environmental Initiative: HEPCA

The largest private sector environmental conservation organization is the Hurghada Environmental Protection and Conservation Association (HEPCA). HEPCA was initiated in 1988 by four out of the then only ten owners of dive centres. It was officially founded in 1992 by 12 members of the diving community of the Hurghada and Safaga regions with the objectives of

promoting and improving diving safety, and protecting and conserving the marine ecology and underwater environment of the Red Sea (HEPCA 2007). In 1995 HEPCA registered as a Non-Governmental – Non-Profit Organization with the Red Sea governorate and the Ministry of Social Affairs. Today, HEPCA is the leading NGO in Egypt working towards marine and land conservation, and it works closely with EEAA in enforcing environmental protection laws, developing monitoring and management strategies, and lobbying for environmental considerations in legislation. Their success is reflected in changes to over 32 laws, articles and decrees. Today, the HEPCA mooring project is the largest mooring system and is maintained in Hurghada, Safaga and the Southern Red Sea region. HEPCA receives support funding from both the public and private sectors, both international and local, including local hotels and dive centres, USAID, Coca Cola International and Vodafone Egypt (Key Informant Interview 15, 2008).

4.9.2 Mooring

HEPCA is involved in a variety of projects, the largest of which is the mooring project. They have created the largest mooring system in the world, by installing buoys in several dive sites to prevent boats from anchoring onto reefs. Together with USAID and the EEAA, they have installed over 1000 moorings in the Red Sea. They also train boat captains and crews on proper usage of the buoys in their boat crew training project to avoid unnecessary coral damage. Other projects that they are involved in include environmental education through the Hayah project which was launched on Earth Day, April 2008. This project is aimed at raising environmental awareness and encouraging active stakeholder participation (Key Informant Interview 15, 2008).

4.9.3 Zoning

HEPCA has also been successful in zoning ecologically sensitive and valuable areas through their South Development, Abu Dabab and Samadai projects. The Samadai project was

successful in protecting the Samadai reef, a reef near Marsa Alam, which is populated by a large number of dolphins. In an effort to maintain the number of dolphins a visitor capacity was implemented of 200 visitors/day and an entrance fee charged of $29.30/visitor. Prior to this, there are reports of up to 2500 visitors/day during peak tourist seasons. Abu Dabab was also zoned in order to protect endangered species including the dugong and turtle populations (Key Informant Interview 16, 2008).

4.9.4 Giftun Island

HEPCA's largest success story was in 2004 when they succeeded in saving Giftun Island from a $2 billion Italian tourism development project. The island is considered the most precious diving site in Hurghada as 40% of its diving sites are off its shores. Together with another Red Sea NGO, the Red Sea Association for Diving and Water Sports (RSDASS), a huge campaign was launched with _save our Giftun' and _not for sale' slogans, which targeted the international community to put pressure on the government. Over 10,000 signatures were gathered in an online petition and, consequently, the government backed down on the development plans. The president Hosni Mubarak issued a decree declaring Giftun a protected area and indicating that no further tourism development could be initiated on any of the other 26 major islands in the Red Sea, 22 of which were already protected areas (Key Informant Interview 16, 2008).

4.9.5 South Development

The South Development project is a large proactive conservation project that has become a priority. The government plans to develop the entire southern Red Sea coastline from El Quiseir to the Sudanese border for tourism, which to date is largely undeveloped. This is an ecologically valuable area and is home to hundreds of endangered and endemic species of animals and coral reefs. HEPCA is in the process of campaigning for a change in the

development plan, so that hotel facilities, like beaches, are centralized and the buildings are constructed away from the coastline (Key Informant Interview 16, 2008).

4.9.6 Solid Waste Management

Over 500 tons of waste is generated in the Hurghada region daily and, prior to the initiation of HEPCA's solid waste management project, most of its disposal was unregulated and sporadic. Together with USAID, the EEAA , the National Parks of Egypt, the Association for the Protection of the Environment (APE), and with donations from the private sector, a waste management system was initiated. This system includes waste separation, recycling, and two material recovery facilities, in Hurghada and Marsa Alam. This project has proven successful in waste management as well as in generating local employment opportunities and promoting environmental considerations (Key Informant Interview 15, 2008).

4.9.7 Divers

Divers are taking part in the beach cleanup process as well. The Project AWARE Foundation together with PADI and the Ocean Conservancy have declared September 19th International Cleanup Day. In this event, volunteer divers remove debris that has entered the ocean and is often caught in the corals. In September 2007, much rubbish was collected including cigarette butts, plastic and glass bottles, cans, food wrappers, and discarded fishing gear. Much of the garbage lies on the sea bed and can only be removed by divers by hand (Key Informant Interview 19, 2008).

4.10 The Green Star Initiative

As a result of rapid tourism development in Egypt, which has resulted in a number of environmental consequences such as water contamination and inefficient waste disposal, a group of NGOs in Egypt initiated the Green Star Initiative. The Green Star Hotel project is part of the Green Star Initiative. It was jointly developed by AGEG Consultants eG, Orascom Hotels and

Development (OHD), and the Public Private Partnership (PPP) programme of the German foreign aid program, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) (―Initiative" 2008).

The Green Star Initiative is the first in Middle East to develop an ecolabel for hotels and resorts: the Green Star Hotel label. The aim of this project is to promote environmentally sustainable tourism practices in Egypt. The Red Sea town of El Gouna is a voluntarily designated site for this pilot project, in anticipation that the Green Star Initiative will be implemented by other tourism-reliant cities in Egypt and elsewhere in the Middle East (―Initiative" 2008).

4.11 A Comparison of Environmental Planning in Hurghada and El Gouna

Table 4.9 Comparisons of Key Features of Hurghada and El Gouna

	Hurghada	**El Gouna**
Date tourism began	1980's (Hawkins& Roberts, 1994)	1993(Orascom Development Holdings 2008)
Ownership and Management	Government	Private sector (Orascom Development Holdings 2008)
Green Globe Certification	No	Yes
Uniform Architecture	No	Yes
Beachfront	60 km (Serour, 2004)	10 km (Orascom Development Holdings 2008)
Population	35,000 (Serour, 2004)	10-15,000 (Orascom Development Holdings 2008.)
Number of Hotels and Resorts	123	14 (Orascom Development Holdings 2008)
Average hotel rating	3.4	4.4
Existence of a plan	No	Yes
Environmental conditions	No	Yes (see Appendix C)
Activities prior to tourism	Fishing (Hawkins & Roberts, 1994)	None
Clientele	National and International (Key Informant Interview 17, 2008)	Mostly International (Key Informant Interview 17, 2008)
Airport	Yes	Yes
Distance from Cairo	430 km	460 km

Table 4.9 compares the main features of Hurghada and El Gouna. The two destinations are identical in terms of climate and the tourism activities that they offer, but they vary greatly in the planning and management of all aspects of the city including environmental issues. Hurghada is an old city, founded in the 20th century (―Hurghada" 2007), and for many years fishing was the main economic activity (Hawkins and Roberts 1994). Tourism to Hurghada started relatively recently, during the 1980's (Hawkins and Roberts 1994), has expanded rapidly over the past thirty years, and continues to do so (see Appendix C). The growth in infrastructure has lagged the growth in the city. Thus, it has been provided in a reactive manner. For example, a city-wide sewage and waste disposal plan was only recently implemented. Individual hotels and resorts were responsible for getting rid of their own waste, resulting in poor overall environmental commitment in the region (Key Informant Interview15, 2008). El Gouna, however, was built to be a tourism destination, with a specified capacity, and an overall master plan (Figure 4.6).

Figure 4.6 Master Plan of El Gouna

Source: ―EGouna Masterplan" n.d.

Accordingly, the required waste management facilities were planned for and put into place early on. These differences are reflected in the sewage treatment and disposal, the solid waste management, and the city structure and planning of both cities, which are discussed in further detail in the following sections.

Figure 4.7 Map of Hurghada's Surrounding Region
Source: —Hurghada" 2007

4.11.1 Sewage Treatment and Disposal

For many years, sewage disposal was a problem in Hurghada. It was kept in tanks under buildings and was regularly pumped out and transported into the desert where it was dumped. Today the situation has improved as it is now dumped into a large green area approximately 30 km to the north, directly opposite to El Gouna. This area is marked A in Figure 4.9, and El Gouna is marked B. Also, the main road to the airport is green with trees and untreated sewage water is used to irrigate them. Although this is a seemingly sound method of disposal and the greenery is attractive, the foul smell that accompanies it and hygienic issues suggest otherwise. Some resorts are reported to have their own sewage treatment systems (Key Informant Interview 16, 2008).

Figure 4.8 El Gouna Sewage Treatment Plant

Photo taken by Zainub Ibrahim

Figure 4.9 Satellite Image of El Gouna and the Hurghada Sewage Dumping Site

In El Gouna, there is a water purification plant located inside the town, which partially cleans the sewage water from all of the hotels, resorts, homes and services. The water is then used to irrigate all of the green areas and golf courses in an effort to conserve water, and to dispose of sewage water in a productive manner. Unlike in Hurghada, the sewage management system in El Gouna was planned for before El Gouna‘s construction (Key Informant Interview 15, 2008).

4.11.2 Solid Waste Management

Hurghada suffers from mismanagement of solid waste. The average generation of waste per guest per night is 2.18 Kg (Engel and Farouk 2005). Although environmental laws and regulations dictate the proper disposal of waste, the frequency of garbage along the road and around the city suggests that these rules are not enforced. Solid waste is disposed of along roadsides and construction waste is commonly found on adjacent pieces of land and along the road. The lack of enforcement of environmental laws is a result of a lack of resources

(knowledge, money and equipment) to enforce proper waste management in tourism developments (Engel and Farouk 2005). There is, however, a recycling project in Hurghada, which was established and is managed by HEPCA. This project recycles waste in a number of steps, basically first separating food and organic waste, and then transferring it to local Bedouins, who use it to feed their cattle. The rest of the waste undergoes recycling in a waste management plant. This system was designed for both Hurghada and Marsa Alam, south of Hurghada. Although this system is reportedly successful and has had a significant impact on waste disposal in Hurghada, there is nonetheless evidence that there is much waste that does not pass through this process (Key Informant Interview 15, 2008).

El Gouna produces 320 tons of waste each month, all of which is fully recycled in an on-site recycling plant. The waste management team is comprised of 115 garbage collectors and truck drivers who collect garden debris and garbage daily, and deliver it to a garbage separation and recycling plant located just outside El Gouna where there is full recycling of all waste. Food and organic wastes are used to feed farm animals and for fertilizer. Paper is recycled to make greeting cards, envelopes and gift bags which are available for sale in the handicraft shops downtown. Plastic is recycled into construction materials and coat hangers. This recycling plant fully covers its costs, promoting both environmental and economic sustainability (–Fascinating Adventures of Garbage" 2008).

4.11.3 City Planning

The prominent style of hotel and resort structure in Egypt is designed in a way that uses minimal city planning and takes little account for sustainable use of the coast. Hotels and resorts are typically constructed directly along the coast, each having full ownership and control of the beach in front of the hotel. This style was implemented in Hurghada and has resulted in 90%

coral deterioration. Hotels and resort developers and managers are not very interested in corals and biodiversity, and prefer to have white sandy beaches. As a result, many hotels and resorts were found to have blown up corals, replacing them with fine sand, destroying corals and other marine life in the process. .The resulting overall development trend in Hurghada is linear, as shown in Figure 4.10, with resorts and hotels extending along the beachfront, while in El Gouna development are in designated areas with the majority of hotels and resorts being constructed inland, sharing common beaches, shown in Figure 4.6.

Figure 4.10 Map of Hurghada Hotels
Source: (“Your Holiday Home” n.d.)

From my stays at El Gouna and Hurghada it was evident that El Gouna has implemented a more sustainable style of tourism planning in coastal areas. Hotels and resorts are constructed away from the beach inside the city, and there are shared beach areas with a full range of services. Shuttle busses transport tourists to and from the beach from 9:00 am to 6:00 pm and there are rickshaws that can be used for a fee of 1 Euro during other times. This ride is usually about 3 minutes long. As a result, the beach front has been designated for different water sports, diving and for swimming. Each hotel has a towel area on the beach from which its guests can obtain towels and cushions for lounge chairs.

4.11.4 Conclusion

Based on an examination of active environmental organizations in Hurghada, and on comparing Hurghada and El Gouna‘s planning and management, it can be concluded that that the Egyptian private sector is more successful than the government sector at environmental protection, and thus environmentally sustainable tourism development. This is reflected in HEPCA‘s success as the leading environmental protector in Hurghada, and in a comparison of environmental commitment in Hurghada and El Gouna.

Although Hurghada and El Gouna are identical destinations in terms of sun, weather, water clarity, corals, water sport, and many other characteristics, they differ drastically in terms of environmental commitment. The other main difference between the two destinations is the type of ownership. Hurghada was planned and is managed as any other city planned by the state. El Gouna, however, was planned and is managed by a privately-owned company.

El Gouna is more environmentally committed than Hurghada. This is partially a result of better city planning which supports environmental protection and sustainable tourism. El Gouna

management also purposely involve it in environmental initiatives, and this is reflected in the creation of a system that forces investors to comply and encourages them to take their own additional steps to participate in the environmental initiative, creating a culture with environmental awareness and sustainability at its core.

Although the private sector has proven to be environmentally conscientious, they may inflict damage even if their motives are altruistic. It thus necessary that the state acts as an environmental overseer by monitoring the private sector is to ensure that the environment is always protected.

4.12 The Private Sector and the Need for Supervision

The private sector has shown a considerable amount of environmental commitment in the Red Sea area. However, it is possible that when attempting to protect the environment they could actually be harming it. Lack of education and the use or improper techniques may result in negative environmental consequences. Such was the case with a coral restoration project in 2004.

In 2004, a French NGO called Compagnons des Mers (Friends of the Sea) proposed a project that aimed at restoring damaged coral areas around the Hurghada region. The original plan for the project was to dispose of all debris and waste from off of the reefs, and to collect broken corals and to implant them in nurseries for re-growth, later replacing them in their original locations.

The selected site was partially destroyed by construction in the mid 1990‘s. A written agreement was made between the general supervisor of the National Parks of the Red Sea, Red Sea Governor General, and the CEO of Compagnons des Mers outlining the terms of the project. Among these conditions was the requirement that no healthy reef colonies could be cut or

removed and only broken coral found floating on the surface or lying on the ocean floor could be used for the transplantation process. However, a few months into the project, local divers noticed that colonies of coral reef were missing, which led to an investigation and marine biologists hired by the national park determined that over 500 colonies, approximately 0.7 meters in diameter, had been removed to be placed in the coral farm, over half of which had died. This led to the prosecution of the CEO of the company, his imprisonment and he was charged with a fine of 62,300 USD. It was later revealed that the CEO had false credentials as a marine biologist and that the national park failed carry out regular supervision of the project (Key Informant Interview 19, 2008).

In this case, the Red Sea governorate and the National Parks of the Red Sea were the designated overseeing authorities. However, regular inspections were not conducted resulting in severe environmental damage. It is thus essential that an environmental authority oversee private-sector and non-profit environmental efforts in a supportive and encouraging manner.

4.13 The Future Direction of Tourism Development

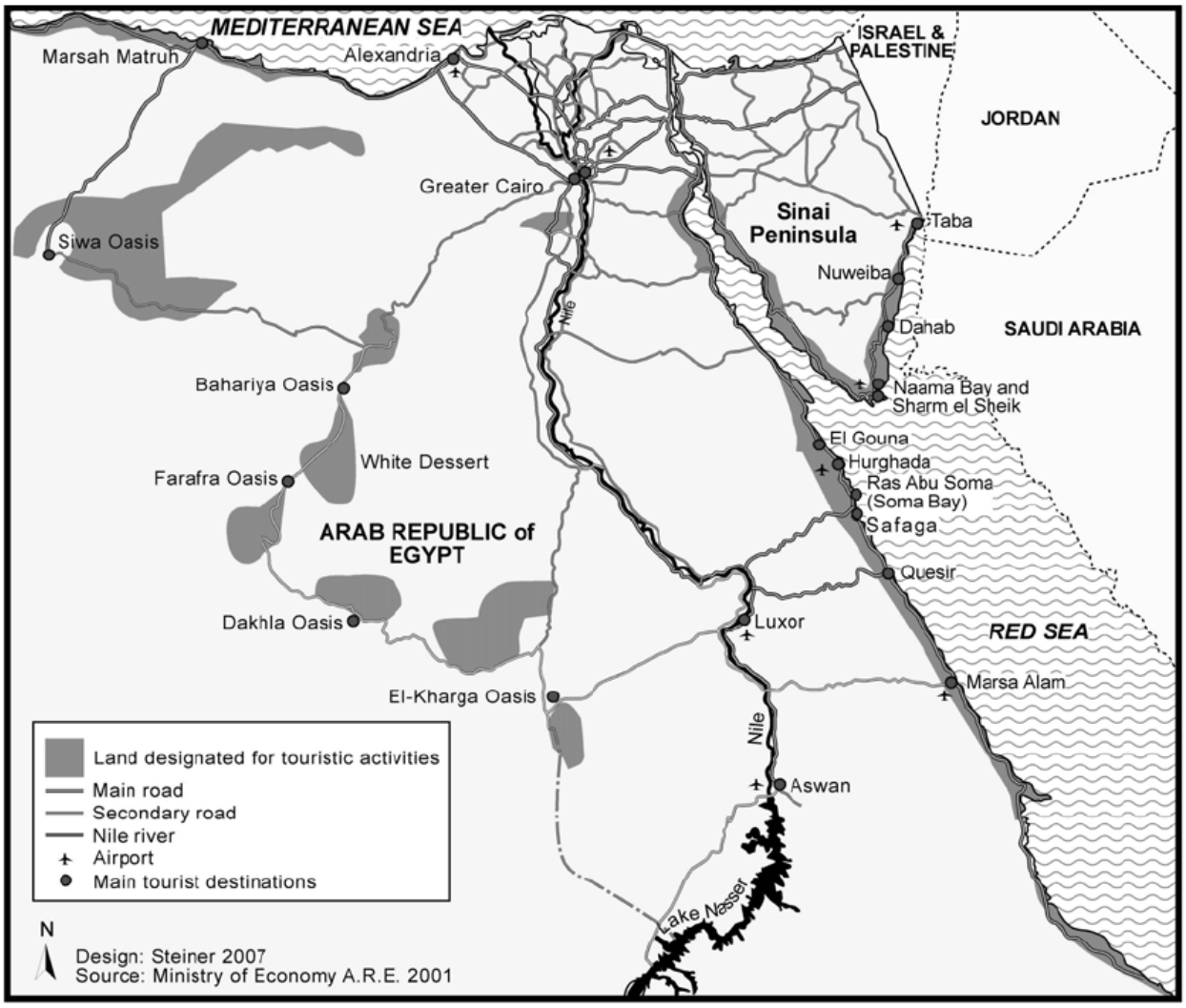
4.13.1 Quality

Egypt continues to seek to increase foreign and domestic investment in the tourism sector, but hopes to improve the infrastructure and quality of tourism. In order to encourage tourism growth, a draft bill amendment made to Law 38 of 1977 was approved in June 2008 by the Egyptian parliament. Among the changes is granting freedom to foreign tourism companies to operate if they have a minimum capital of 560,000 USD. In order to secure a minimum quality of tourism, a minimum capital requirement of 18,700 USD is required to establish as a tourism operator. Furthermore, the bar has been raised for hotel classification by Ministerial Decree No. 439 of 2006 in an effort to further improve quality in tourism, and an additional sixth

star is now a possibility (―New regulations" 2006). However, environmental concepts are not included in determining the quality of a hotel or resort facility.

In its current and future tourism development, the government hopes to attract wealthier tourists and is thus focusing on golf and yacht tourism development and promotion. The hope is that by doing so, Egypt will raise the number of tourists from the 11.1m in 2007 to 14m by 2011 and 27m by 2022 (Key Informant Interview 6, 2008).

Figure 4.11 Master Plan of Land Designated for Tourism Development in Egypt



Source: Richter and Steiner, 2007

4.13.2 Ecotourism

Ecotourism is becoming increasingly popular internationally and in Egypt. The term ecotourism is not explicitly defined. There are, however, three main themes of which most definitions encompass at least two: nature-based, environmentally-educated, and sustainably managed (Blamey 1997; Buckley 1994). Mowforth and Munt (2003) add another aspect to the term—the high purchasing power of the tourist: ―Ecotourist‘ has a double meaning, however, for not only does it signal an interest and focus of this type of tourist on the ‗environment‘ (*eco*logy), it also indicates the ability to pay the high prices that such holidays command (*eco*nomic capital)" (121). This could make this option especially lucrative for Egyptian tourism; however, Egyptian tourism authorities fail to recognize the full economic benefits of ecotourism.

The ETA, in its ecotourism development, mainly focuses on nature-based and environmentally sustainable experiences. It does not address the educational nor economic aspects. This is reflected in the TDA‘s classification of the types of ecotourism in Egypt. The TDA has divided ecotourism in Egypt to four segments, which are being simultaneously developed: Diving and marine tourism, desert tourism, bike tourism, and wellness, spa and medical tourism. In this sense, the Egyptian ecotourism portfolio is merely an extension of the currently prevailing forms of tourism in Egypt.

4.13.3 Diving and Marine Tourism

The entire Red Sea coast south of Marsa Alam is currently deserted and undeveloped for tourism. As shown in Figure 4.11, the TDA has plans to develop this region (from Marsa Alam to the Sudanese boarder) in an effort to increase diving and marine tourism, and to decrease tourism pressure from large coastal tourism cities such as Sharm el Sheikh and Hurghada. The Egyptian Prime Minister, Dr. Ahmed Nazif, in a press interview at the World Economic Forum

held in Sharm el Sheikh during May 2008, commented that due to increasing concerns for the potentially destructive growth of Sharm el Sheikh, the government no longer aims to increase tourism in that specific destination, but rather aims to increase tourism in other cities that do not receive as much tourism attention. This dispersal strategy is commonly used to overcome problems of environmental degradation in tourism in developing countries, and has been used in the Maldives and Nepal (Brown et al., 1997). This strategy binds together both the opinions of the EEAA and the ETA because it aims to increase the overall number of tourists to Egypt, while maintaining a limit on the number of tourists to a specific destination.

Recent development in this segment includes the formation of a cluster that comprises 90% of all dive centres in Egypt. Together they have formed an alliance with ISO and have created a code of ethics and regulations to limit the environmental impacts of diving on the coastal environment. This code includes regulations on the types of equipment used, such as motors, and the performance of diving boats; the usage of equipment, such as using diving boats for fishing, and anchoring on coral reefs, among other restrictions regarding the treatment of corals during dives (Key Informant Interview 12, 2008).

4.13.4 Safari and Desert Tourism

Considering the fact that 98% of Egypt is desert, it is logical that desert tourism should play a more significant role in Egypt‘s tourism portfolio. In an effort to achieve this, several desert regions surrounding the Siwa, Bahariya, Farafra, Dakhla, and El-Kharga oases, shown in Figure 4.11, have been designated for tourism development. The main attractions of these regions are prehistoric caves, wildlife, and fossils (Key Informant Interview 6, 2008).

Wadi al-Hitan (Whale Valley) region, located in the Western Desert (which encompasses the desert region west of the River Nile), just south of Cairo is receiving the greatest attention

from the tourism development authority. This is first destination in Egypt to be listed in UNESCO‘s World Heritage list, and it was included in February 2008. Wadi Al-Hitan‘s value lies in the fossil remains of the now extinct *archaeoceti* sub-order of whales. It is the world‘s most important site for demonstrating the evolution of the whale from a land-based animal to an ocean-going mammal (UNESCO 2008).

4.13.4.1 Bicycle Tourism

Bike tourism varies widely in its definition. The South Australian Tourism Commission (South Australian Tourism Commission 2005: 3) defines cycle tourism as ―eonsidered to be for the purpose of holidays, recreation, pleasure or sport; and to include either overnight stays, or day trips to other tourism regions during which the visitor either engages in active cycling, or is a spectator at a cycling event”. Ritchie (1998:568), in his definition of bicycle tourism, assumes a less sport-event attitude, and a more tourism and leisure approach:

> A person who is away from their home town or country for a period of not less than 24 h or one night, for the purpose of a vacation or holiday, and for whom using a bicycle as a mode of transport during this time is an integral part of their holiday or vacation. This vacation may be independently organized or part of a commercial tour and may include the use of transport support services and any type of formal and/or informal accommodation.

The ETA approach to bike tourism is similar to Ritchie‘s in that it considers bikes being used as a mode of transport during a vacation, but cycling is not necessarily the main purpose of the visitation. Bicycle tourism in Egypt is currently merely a proposed idea which, if implemented, will be incorporated with other tourism forms, such as archaeological and safari tourism, in an effort to attract eco tourists and to promote environmentally sustainable tourism. The required infrastructure, such as bike paths, is being planned and must be constructed before bicycle tourism can be initiated.

4.13.4.2 Wellness, Spa, and Medical Tourism

There are currently a number of spa resorts in Egypt, particularly surrounding the Red Sea region, and in the popular cities of Hurghada and Sharm el Sheikh. However, the ETA plans to promote a more medical, therapeutic type of tourism. This is particularly the case in the Sinai which has a rich collection of medicinal herbs and plants, many of which are endemic to the region. It also contains many sources of curative tourism such as hot springs with therapeutic effects, such as the Pharaoh‘s Bath, Moses‘ Bath and Moses‘ springs. They have been scientifically proven to have curative effects in treating some chest, skin and eye diseases, as well as rheumatic and skin diseases. The hot sands are also effective in treating rheumatism (Key Informant Interview 6, 2008).

4.14 Collaboration between the Public and Private Sectors

Collaboration theory is a wide, complex topic that will not be detailed in this study. However, its importance is noted. The purpose of this section is thus not to discuss collaboration theory and ways to apply it to the private-public sector relationship, but rather to emphasize its importance and applicability to sustainable tourism development. The Egyptian government, like most other developing country governments, is struggling with various development efforts in many different fields. As different sectors develop at different paces, gaps in policy and implementation may arise. Such is the case with environmental issues in tourism development in Egypt. Thus, in order for Egypt to sustain its environment it must shift from a traditional sustainable tourism model that is based on public policy enforcement to a new paradigm that focuses on cooperation and partnership between public and private sectors (Hassan 2000).

It is common for developing country governments to assume a larger role in tourism development whereas in developed countries, the tourism industry is largely in the hands of the private sector (Timothy 1998). As for Egypt, it is safe to say that tourism development is taking

place at a faster rate than most other sectors. This has resulted in negligence in environmental matters on the part of both public and private sectors. Yet, the linkages and relationships between these sectors are nonetheless crucial to environmental sustainability (Brown 1991). In fact, the private sector is a catalyst for tourism development. It has adopted new management and production techniques and utilized technology that would not have otherwise been adopted (Fayos-Solá 1996). In this sense, the private sector has the capacity to adapt their policies and production methods to be increasingly environmentally friendly in ways that the government cannot. However, there must be a motive for them to do so. The government should thus take advantage of the private sector‘s ability to implement environmental methods in striving for environmentally sustainable tourism development.

Accordingly, the type of investors that are targeted is crucial to the success of environmental policy (Hassan 2000). The success of any environmental plan is crucially dependent on all stakeholders. Yet the existence of numerous types of private investors with differing agendas, priorities and environmental viewpoints is reflected on the difficulty of coming to a consensus and achieving a collaborative solution (Jamal and Getz 1995). It is now time for the government to assume the role that it has claimed as ―planner/regulator and promoter/facilitator” (Wahab 1997: 143) by enforcing environmental policy changes. Egyptian tourism policy should thus be modified from merely aiming to settle for attracting investors to only accepting environmentally conscientious investors. The Egyptian tourism industry is now at a stage where it can afford to set restrictions without suffering financial losses.

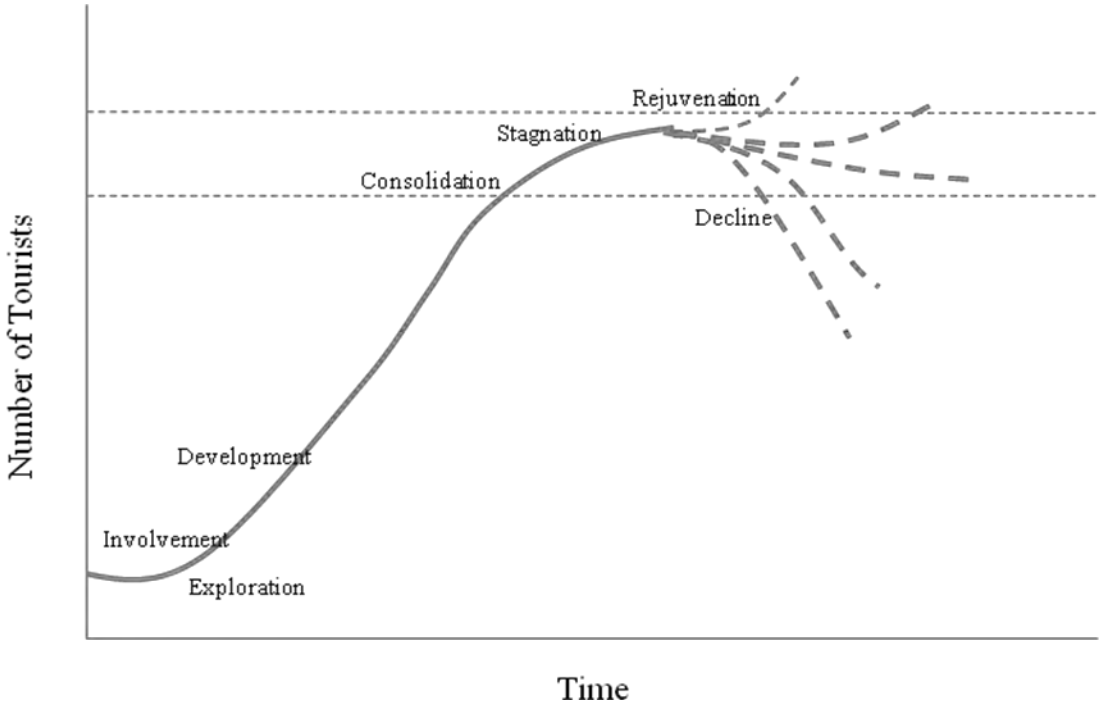
It is not in the best interest of the environment to rely solely on private investors to manage the tourism sector:

> ...the growing reliance on private governance in global environmental management represents a privileging of a business-friendly, market-oriented approach to environmental politics over a more holistic and ecology-oriented understanding of the relationship between human activity and environmental destruction (Falkner 2003:81).

Yet environmental sustainability is a heavy burden for the government to carry alone. Therefore, efficiency, equity and harmony between stakeholders can only be achieved through their full participation in tourism planning (de Araujo and Bramwell 1999). An interactive form of governance should thus be adopted based on cooperation between public and private parties (Glasbergen 1998). Although this implies new roles for both the government and for private investors in tourism sustainability, only through collaboration between stakeholders and mutual recognition of the differing perspectives can environmentally sustainable tourism be achieved (Jamal and Getz 1995).

4.15 Butler's Tourism Cycle and the Future of Tourism in the Red Sea

Figure 4.12 Butler's Cycle



Source: Butler 1980

The concept of a tourism area cycle assumes that a tourist destination goes through stages in its life, beginning with exploration, involvement, then development, and eventually ending in stagnation and decline (Figure 4.12.). Figure 4.12 can be juxtaposed against Figure 4.3, which shows the growth in tourism investment in Egypt. Based on this comparison, it seems that Egyptian tourism has entered the stagnation phase. This is especially relevant to tourism in the Red Sea, and this study also supports the idea that tourism to the Red Sea coast is entering the stagnation phase, as it is presenting lower environmental social and environmental standards, and is now catering to a less wealthy clientele (Leujak and Ormond 2007). Whether the next phase will be rejuvenation or decline depends on how well tourism, and the environment is sustained.

Chapter Five

Discussion

5.1 Conclusions in Brief

Based on this study the following conclusions can be made:

1. The Egyptian private sector is more successful than the public sector at planning and implementing environmentally considerate tourism establishments.
2. Egypt‘s tourism pricing policy is an important issue and its implications pertain to environmental concerns.
3. Egypt has a sufficient number of environmental regulations and institutions but the problem lies in the efficiency, functioning and implementation of regulations.
4. The environmental initiative in Egypt is largely symbolic and designed to attract foreign assistance funds.

5.2 Suggestions

From these conclusions, the following suggestions are made to improve environmental protection in Egyptian tourism:

1. Egypt should focus on tourism quality rather than quantity.
2. The private sector should be encouraged to undertake large-scale tourism development projects such as El Gouna.
3. Egypt‘s marketing competitive advantage in tourism should be the quality and uniqueness of the destination rather than its price.

4. Governmental institutions should assume a more active and less symbolic role and, in order to as do so, should employ experts and knowledgeable professionals as decision makers.

According to this study, the Egyptian case supports Lesser et al. (1997) reasons for why environmental policymaking falls short of the ideal. Table 5.1 lists these reasons, and examples from Egypt that support them. This list is beneficial to environmental policymaking in Egypt as it suggests that attending to the specific outlined reasons will ameliorate environmental policy success and implementation in Egypt.

Table 5.1 Why Environmental Policymaking Falls Short of the Ideal

Reason	**Explanation**	**Example from Egypt**
Values and problem definition	Defining problems and solutions is value-based, and values are difficult to define.	Investors and business people in Egyptian tourism do not recognize environmental degradation as a threat to tourism (Key Informant Interview 19, 2008).
New information, new problems	New environmental problems are constantly being identified, and policy making requires time in order to respond appropriately.	Plastic bags have been identified as a major problem in the marine environment in the Red Sea, as animals mistake them for jellyfish, which they then consume (HEPCA 2007). Policy responses directed at use of plastic bags in the Red Sea region have yet to be taken.
Inadequate enforcement and monitoring	Environmental laws are often passed without any thought as to how they will be enforced.	Environmental laws have been passed that cannot be enforced due to inadequate equipment. For example, insufficient number of boats to properly enforce environmental laws in live-aboard diving boats (Key Informant Interview 7, 2008).
Divided policymaking authority	Environmental problems often fall within the authority of several policy-making bodies.	Environmental authority in tourism is divided among the regional governorate, the national EEAA, tourism authorities, local police, tourism police, and the chamber of dive centres to name a few.

Source: Adapted from Lesser et al. 1997:93-100

This study shows how the relationship between tourism and the environment can be complex as a result of the multifaceted nature of tourism and of sustainable development. The volatility of the surrounding environment constantly exposes tourism to new factors to which it must respond, and when attempting to develop tourism in a sustainable manner, the nature of environmental management must change as well. This is seen in the privatization that has occurred in many developing countries, including Egypt. The privatization of the tourism industry has caused a change in the structure of the industry and, subsequently, has requires a change in the system that protects the environment.

In Egypt, the tourism industry was privatized, yet the government still holds full responsibility for environmental issues. The private sector is not required to maintain the environment on which it relies, because the government assumes this role. However, there are a number of factors which hinder the governments‘ environmental considerations. For example, the top priority in most developing countries, including Egypt, is economic development. This is often pursued at the expense of environmental quality, and the accompanying justification is that environmental issues are concerns of developed countries.

If it is not within the capacity of a developing country‘s government to attend to the environment, as many of them argue, then this responsibility can be passed on to the private sector. In this case, the state would act as an environmental regulator and an overseer of projects and initiatives pertaining to the environment. In this sense, the state would set rules and regulations that force the private sector to maintain their surrounding environment. For example, proper recycling and waste management practices, beach cleanup, posting information signs at key locations are all tasks that should be required by beach resorts.

The private sector often willingly engages in environmental protection. This is displayed by numerous projects in Hurghada and El Gouna. In fact, in Egypt the private sector has proven to be more successful than the governmental sector at planning and managing environmental efforts. However, the private sector must be monitored not only to ensure that they are attending to the set rules and regulations, but that in attempting to preserve the environment, they do not accidentally destroy it.

An example of how the private sector may unintentionally destroy the environment is by lowering prices in order to attract a large amount of tourists in an attempt to remain competitive even during low seasons. In the Egyptian Red Sea, this has resulted in a social carrying capacity that exceeds the ecological carrying capacity, and thus consistent environmental degradation resulting from tourism to the area. Therefore, the roles of both the state and of the private sector are crucial to the success of environmentally sustainable tourism development.

This study develops the arguments from the supply-side perspective. The government and the tourism industry are held responsible for the changes in the environment and, consequently, the proposed changes are directed at the supply side. It is however relevant to note that in many cases it is not just these supply-side factors that lead to changes in demand. In the case of tourism in Egypt, it is possible that deterioration in the environmental quality of the natural resources of destinations and a decreased catering to ecotourism accompanied with an increased catering to 3S tourism is a result of changes in demand. European tourists are not as interested in certain types of tourism such as historical tourism, and ecotourism as they were in the past. This could be attributed to changes in tourists‘ education curriculum. This however does not dismiss the claim in this study about the need for sustainable tourism development but, rather, calls for a different type of tourism planning. For example, it might be possible to cater to 3S tourism in

areas that are not as ecologically vulnerable, for example along the Mediterranean Sea, which unlike the Red Sea, has few coral reefs, or by limiting 3S tourism in the Red Sea to already degraded areas.

5.3 Back to the Literature

5.3.1 Tourism in Egypt

Tying the findings of this study back to the literature on tourism in Egypt it is evident that although the open door policy was beneficial to the economy by increasing foreign income from tourism and the growing private sector investment, there are nonetheless gaps that were overlooked in the formulation and implementation of aggressive tourism expansion plans. Environmental gaps present a major gap, and the Egyptian environment has suffered as a consequence.

The active private sector is a positive economic indicator; however it is not necessarily the case that the environment must be compromised. Furthermore, private sector eager response to investment incentives suggest that this sector may be react similarly to environmental incentives; a characteristic which should be utilized in promoting environmental issues and sustainable development in the Egyptian tourism industry.

According to the Butler cycle of tourism development, Egypt is currently at the maturity/stagnation stage which is characterized by high activity and high visitor use (Nickerson and Kerr 2004). Whether Egyptian tourism‘s next phase will be rejuvenation or decline depends on how well tourism resources are managed, and how well the environment is attended to. Egypt‘s tourism is thus at a crucial phase, and unless conscious efforts are made to preserve and improve the environment, tourism in Egypt will decline, a stage characterized by a decline in the quality of services, and number of tourists (Nickerson and Kerr 2004).

5.3.2 Growing Private Sector

The findings of this study support El-Hayawan and Sullivan (1993), Donaldson (1982) and May et al (2007)'s assertions regarding the increasing societal influence of the private sector. This is mainly a consequence of the increasing number of investors and investment projects stemming from the private sector, which supports Alvarez Gil et al (2001) and Ryan (2002) who emphasize that the majority of tourism stakeholders are from the growing private sector.

In addition to the growing role and influence of private investors, this study supports the finding that they are increaseingly environmentally active (Hu and Wall 2008; Hamilton and Sanders 1999; Donaldson 1982; Mowforth and Munt 2003; Corporation 2005). However, these studies also question the motives behind attending to environmental issues, which was not verified by this study. In fact, attending to environmental issues is seen as having long-term economic benefits to the private sector (Schmidheiny 1992; Shiravastava 1995; Goodwin 1996; Butler 1999). Such is the case in Egypt, where now the future of tourism is largely dictated by how well environmental resources upon which tourism is dependant are sustained.

5.3.3 Tourism Supply and Demand

From looking into the literature on the dictators of tourism supply capacity (Leujak and Ormond 2007; Goeldner et al. 2000) this study finds that Egypt's tourism capacity is determined by social rather than ecological factors. This has contributed to the environmental degradation of environmentally depended tourism destinations in Egypt, and as a consequence the quality of the destination has suffered, which supports Goeldner et al (2000)'s theory on the consequences of high social capacity and the environment.

5.3.4 Low Price Consequences

Goeldner et al. (2000) asserts that pricing in tourism is largely dictated by the interaction between the supply and demand for tourism to a specific destination. However, if supply exceeds

demand, then the price will be lowered or other uses for tourism facilities will be created. This study finds that in Egypt tourism prices have been lowered to increase demand to meet the social supply capacity.According to Laarman and Gregersen (1996) employing a low price strategy in tourism has a number of detrimental effects. This study has found many of these effects to be characteristic of the case in Egypt. These effects include crowding, resulting in degradation to the natural environment, lower revenue, and an indication that nature has a low value, as price is a major indicator of value.

5.4 Implications

The findings of this study have a number of implications for different actors. These implications are especially pertinent to tourism stakeholders in Egypt, and to academia at large, which are addressed in the following sections.

5.4.1 On Stakeholders

Ryan (2002) outlines the stakeholders affected by tourism performance, policy and planning, displayed in Figure 2.1, to which the implications of this study apply. On the Egyptian Red Sea coast, it is apparent that sustainable tourism development is in the best interest of all stakeholders of both private and public sectors.

The Egyptian government sector must become conscious of the negative consequences of haphazard tourism development on the sustainability of the industry, and should thus prioritize the environment in its future tourism development plans, especially along the Red Sea coast. Among this environmental consideration is to encourage private investors to pursue environmental initiatives that protect the environment in order to sustain the industry upon which their businesses rely. The Egyptian private sector has proven to be responsive to government incentives such as those that encourage investment. This attitude on the part of the private sector

may be similar in initiating environmental projects and in protecting the environment if appropriate incentives are offered.

Private sector tourism investors should also realize the potential gain from maintaining an environmentally sustainable style of tourism. These gains can be reflected in the types of tourists that are attracted, the quality of the service they provide, increased revenues and long-term successful and sustainable businesses. Sustainable tourism development is undoubtedly in the best interest of tourism employees, tourism-dependent projects, projects which feed into the tourism industry, local businesses of tourism destinations, and the economy at large. Egyptian tourism planners should thus set environmental sustainability on the forefront of future tourism plans especially on natural resource-reliant destinations such as tourism to the Red Sea coast.

Environmental NGOs are playing an increasingly crucial role as saviours of the environment in Egypt. Many of these organizations have achieved success in influencing government plans and actions. These organizations should play a larger role especially in large-scale tourism development plans such as that to develop the whole Red Sea coast until the Sudanese boarder. These organizations should also take advantage of growing global environmental concerns, and the willingness of international aid organizations to protect the environment. The Egyptian government has proven to be especially considerate towards the international community in an effort to maintain foreign aid funding and in an attempt to appear as a model developing country. These characteristics can be exploited by ENGOs in order to pressure the government to prioritize environmental protection and sustainable development in tourism.

5.4.2 On Academia

This study addresses issues that pertain to interactions between tourism development, privatization, demand and supply interactions and price consequences in the ecologically sensitive Red Sea. Most literature on the topic addresses these issues individually, and has failed to highlight the interaction between public and private sectors and their subsequent consequences on sustainable development, especially in the case of tourism in developing countries. This study presents the case of tourism development along the Egyptian Red Sea, looks at the contributions from government, and from the private sector, as well as the interactions between the two, and makes a number of findings regarding private and public sector relationships, tourism pricing policy, and environmental institutions and regulations that pertain to tourism in Egypt.

Recent trends of development of the tourism industry, accompanied with a hasty privatization movement are not exclusive to the Egyptian case, but are characteristic of many developing countries. The findings of this study may be applicable to other destinations that share similar characteristics. By further research on privatizing developing countries, and sustainable tourism development, it is possible to reach overarching conclusions that tie these concepts of privatization and environmental degradation of a destination together. Achieving this is critical to creating long-term sustainable tourism development policies, that encourage tourism development and investment without sacrificing the environmental quality of the resources on which the industry relies.

Chapter Six

Conclusions

Sustainability has become a commonly used term in global development. Similarly, the importance of developing tourism in a sustainable manner has become a topic of much concern. These concerns are magnified in developing countries where immediate economic improvement is the ultimate priority, even if sustainability is sacrificed. Similarly, in tourism planning and management, financial gain and employment opportunities often are the top priority, and sustainability is sacrificed in attempting to achieve this. Tourism in Egypt presents an exemplary case study of this phenomenon.

Tourism has become one of Egypt‘s main sources of income, and it has undergone rapid privatization and subsequent growth. This has resulted in numerous policy and implementation gaps including those in environmental policy. Egypt‘s natural resources are thus threatened by this unsustainable tourism growth. This study analyses the impact of the tourism privatization movement in Egypt on the distribution of environmental responsibility between the private and public sectors and the environmental consequences. Changes in the roles of the private and public sector in tourism have been examined and the roles, priorities, and agendas that each stakeholder may have are considered. It is found that sustainable tourism cannot be achieved without the contribution and collaboration of both parties in tourism planning and development. The interaction between the various stakeholders in tourism sustainability is reflected in the level of environmental commitment in tourism in Egypt—particularly along the ecologically sensitive

Red Sea coast where a high level of environmental consideration is necessary for environmentally sustainable tourism development.

This study explains the implications of different types of tourism development for the environment. This has been done by analyzing certain types of information including rules and regulations on tourism development and rules pertaining to the environment in general, interviews with key informants in the governmental sector, the private sector, and in NGOs, and from observation of two case study sites, Hurghada and El Gouna. Egypt‘s tourism industry has undergone relatively rapid privatization, yet the environmental policy has not yet to fully adjust to the new situation. Egypt‘s environmental rules and regulations are not reflective of the level of environmental commitment because they are largely symbolic. In terms of a comparison of private-public sector environmental initiative, a findings of this study is that El Gouna has a much higher level of environmental commitment than Hurghada, and all successful environmental initiatives in Hurghada are from NGOs and the private sector. This finding suggests that the private sector in Egypt is more successful at environmental planning and management than the public sector. Another finding is that Egypt‘s tourism pricing policy draws large numbers of mass tourists, and has resulted in a higher social carrying capacity than the ecological carrying capacity in the Red Sea causing a substantial amount of on-shore development, and consequently environmental degradation.

In terms of practical significance, the findings of this study shed light on the issues of sustainability in developing countries. As mentioned in Chapter 2, the relationship between tourism and the environment is unbalanced. This study, thus takes a step towards attempting to balance this relationship by shedding light on the issues of sustainability in developing countries. It seems that the greatest hindrance is not only how to achieve sustainability, as in the case of

developed countries, but rather convincing authorities and business people of its importance. It also seems that ecologically unsustainable tourism, such as that practiced along the Egyptian Red Sea, does not threaten the continuity of tourism for the near future, but rather the quality of tourism experiences that are provided. This could apply to many beach destinations because catering successfully to 3S tourism does not require a very high level of environmental commitment.

Red Sea conservation scholars and activists are concerned about the consequences of the low prices of tourism on the environment. In fact, such is to the degree that with prices reaching as low as $15/night, it is impossible for Egypt to be making profits on a national level. Accordingly, a subsequent study could analyse Egypt‘s pricing policy, and whether or not it is making profits or losses from natural resource-based tourism (Key Informant Interview 16, 2008). Environmental damage, infrastructure wear, gasoline prices, as well as all other costs to tourism would need to be accounted for. This study would help policymakers to realize the full consequences of low prices, and enable them to set minimum low-season prices for natural-resource based tourism in Egypt.

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Appendix A

Key Informant Interviews

Interview 1: Anonymous (Director of National Biodiversity Dept, EEAA) - 4 May 2008.

Interview 2: Anonymous (Environmental Disasters Management Director, EEAA) - 4 May 2008.

Interview 3: Anonymous (Pollution Control Specialist, EEAA) - 4 May 2008.

Interview 4: Anonymous (Head of International Tourism, ETA) - 8 May 2008.

Interview 5: Anonymous (International Campaign Director, ETA) - 8 May 2008.

Interview 6: Anonymous (Tourism Planning Specialist, ETA) - 8 May 2008.

Interview 7: Anonymous (Employee, USAID) - 10 May 2008.

Interview 8: Anonymous (Employee, DANIDA) - 10 May 2008.

Interview 9: Anonymous (Employee, Bezra) - 10 May 2008.

Interview 10: Anonymous (Employee, CIDA) - 11 May 2008.

Interview 11: Anonymous (Dive Center Owner, Hurghada) - 30 May 2008.

Interview 12: Anonymous (Dive Center Employee, ETA) - 19 June 2008.

Interview 13: Anonymous (Executive Consultant, Egyptian Chamber of Dive Centers) - 5 July 2008.

Interview 14: Anonymous (Tour Operator, Cairo) - 6 July 2008.

Interview 15: Anonymous (Logistics Coordinator, HEPCA) - 7 July 2008.

Interview 16: Anonymous (Environmental Advisor, Red Sea Governorate) - 7 July 2008.

Interview 17: Anonymous (General Manager, Marriott Hotel Hurghada) - 8 July 2008.

Interview 18: Anonymous (Front Desk Employee, Rihana Inn El Gouna) - 9 July 2008.

Interview 19: Anonymous (Managing Director, HEPCA) - 8 July 2008.

Appendix B

Factors that Affect Environmental Commitment in the Tourist Accommodation Facility

1. Size of the Facility
2. Ownership
3. Grade of the Facility
4. Clientele
5. Facility Age
6. Financial Considerations
7. Competitive Advantage
8. Social Responsibility
9. Organizational Culture
10. Centralization
11. General Managers
12. Corporate Decision Makers
13. Regulatory Agencies
14. Customers
15. Local Community
16. Industry Associations
17. Suppliers
18. Environmental Non-Governmental Organizations
19. Employees
20. Media
21. Shareholders

Source: Graci, 2007

Appendix C

El Gouna Environmental Guidelines

- Don‘t pick up shells, not even the empty ones on the beach
- Don‘t touch the mangrove trees
- Don‘t touch, feed, or catch fish or crabs
- Don‘t touch or step on the coral; take care when snorkelling
- Don‘t throw litter in the sea or anywhere else
- Don‘t buy souvenirs made of shells or animal products – most of which are illegal to import/export
- Motor-operated cars and bikes are not allowed on the beach

Photo taken by Zainub Ibrahim

Appendix C

Hotels in the Hurghada Region

	Hotel Name	Class	Airport Distance (km)	Opening	Region	Direct Beach	Rooms	Website
1	Al Nabila Grand Bay	5	30	2007	Makadi Bay	Yes		
2	Aladdin Beach Club	4	14		Hurghada	Yes	390	http://www.aladdinbeachresort.com/al1.htm
3	Alf Leila Wa Leila	4	15		Hurghada	No	222	http://www.pickalbatros.com/alfleilahurgada/index.htm
4	Ali Baba Palace Club	4	14	2001	Hurghada	Yes	654	http://www.alibabapalace.com
5	Ali Pasha	3	26		El Gouna	No		
6	Ambassador Club	3	5		Hurghada	No		
7	Amira Divers Inn	3	53	1999	Safaga	No	95	
8	Andreas Hotel	2	2		Hurghada	No		
9	Aqual Blu	4	12	2005	Hurghada	No	360	http://www.pickalbatros.com/aquabluhurgada/index.htm
10	Aqua Fun	3	2		Hurghada	Yes		
11	Aqua Vista	4	12	2008	Hurghada	No	273	http://www.pickalbatros.com/vistahurgada/index.htm
12	Arabella	4	2	1997	Hurghada	Yes	294	
13	Arabia Azur	4	2	1990	Hurghada	Yes	550	http://www.azurhotels.com.eg/English/arabia/Location.asp
14	Arena Inn	3	24		El Gouna	No	144	http://www.arenainn-elgouna.com/en/
15	Bashera Motel Center	0	6		Hurghada	No		

16	Beach Albatros	4	12		Hurghada	Yes	681	http://www.pickalbatros.com/beachalbatroshurghada/index.htm
17	Beirut	3	3		Hurghada	Yes	132	http://www.beiruthotels-eg.com/hurghada/index.html
18	Bel Air Beach Resort	4	2	2004	Hurghada	Yes	215	http://www.belairbeachresort.com/
19	Bella Vista	3	2		Hurghada	Yes	128	http://www.bellavista-hurghada.com/
20	Biba Hotel	2	1		Hurghada	No	49	http://www.bibahotel-hurghada.com/
21	Birgitte	3	4	1997	Hurghada	No	56	http://lamirahotel.com/Brigitte/index.html
22	Calimera Golden Beach	4	15	2004	Hurghada	Yes	109	
23	Captain's Inn	3	26	2007	El Gouna	No	41	
24	Caribbean World	4	46	2008	Soma Bay	Yes	520	http://www.caribbeanworldresorts.com/
25	Charm Life Paradise	4	5		Hurghada	Yes	250	
26	Cinderella Hotel	2	4		Hurghada	No	40	
27	Club Marmara	4	7		Hurghada	Yes	462	
28	Club Med	4	23		El Gouna	No		
29	Coral Garden	3	75		Safaga	Yes		http://www.coral-garden.com/default.html
30	Dana Beach	5	15	2004	Hurghada	Yes	734	http://www.pickalbatros.com/danahurgada/index.htm
31	Dawar El Omda	3	25	1997	El Gouna	No	57	http://www.dawarelomda-elgouna.com/en/index.php?p=8&n=Location
32	Desert Inn	3	7		Hurghada	No		
33	Desert Rose	5	15		Hurghada	Yes	608	http://www.desertrose-resort.com/
34	Diana Hotel	2	4	2007	Hurghada	No	42	
35	Domina Makadi Bay	3.5	29	2006	Makadi Bay	Yes	552	http://www.dominahotels.com/eng/hurgada_hotel_domina_makadi_bay/
36	Eiffel Hotel	2	1		Hurghada	No		
37	El Arosa	2	4		Hurghada	No		

38	El Gezira	2	4		Hurghada	No	40	
39	El Palacio Resort	4.5	2		Hurghada	Yes		
40	El Samaka Beach	3.5	7		Hurghada	Yes	190	
41	El Tabia	2	2		Hurghada	No	45	
42	Elysees Apartment	3	4	2007	Hurghada	No		http://www.elyseeshotel.net/
43	Fort Arabesque Village	4	26		Makadi Bay	Yes		
44	Friendship Village	3	7		Hurghada	No	129	
45	Geisum Village	2.5	4		Hurghada	Yes		
46	Giftun Azur	4	5	1984	Hurghada	Yes	522	http://www.azurhotels.com.eg/English/arabia/Location.asp
47	Golden 5 Al Mas Palace	5	15		Hurghada	Yes		http://www.golden5.com/en/almaspalace/index.asp
48	Golden 5 Club	4	15		Hurghada	Yes		http://www.golden5.com/en/clubgolden5/index.asp
49	Golden 5 Diamond Beach	4	15		Hurghada	Yes		http://www.golden5.com/en/diamond/index.asp
50	Golden 5 Paradise	5	15		Hurghada	Yes		http://www.golden5.com/en/paradisegolden5hotel/index.asp
51	Golden Sun Hotel	1	1		Hurghada	No		
52	Golf Hotel	2	1		Hurghada	No		
53	Grand Azur Horizon	4.5	1	2002	Hurghada	Yes	410	http://www.azurhotels.com.eg/English/arabia/Location.asp
54	Grand Hotel	4.5	6		Hurghada	Yes		
55	Grand Makadi	5	26	2004	Makadi Bay	Yes	302	
56	Grand Plaza	4.5	8	2000	Hurghada	Yes	232	http://www.grand-plaza.net/home.html
57	Grand Resort	4	6		Hurghada	No	200	http://www.grand-plaza.net/resort/home.html
58	Green Palace Hotel	1	3		Hurghada	No		
59	Hilton Hurghada Resort	5	8		Hurghada	Yes	392	http://www.hiltonworldresorts.com/Resorts/HurghadaResort/index.html

60	Hilton Long Beach	4	17		Hurghada	Yes	912	http://www.hiltonworldresorts.com/Resorts/HurghadaLongBeach/index.html
61	Hilton Plaza	5	3	1997	Hurghada	Yes	212	http://www.hiltonworldresorts.com/Resorts/Hurghada/index.html
62	Holiday Inn Safaga	4	49	1995	Safaga	Yes	302	http://www.holidayinn.com/h/d/hi/1/en/hotel/SAFEG/welcome
63	Hor Palace	3	7		Hurghada	Yes	207	http://www.horpalacehotel.com/index.htm
64	Horus	2	4		Hurghada	No		
65	Hostmark Grand Seas	4	13		Hurghada	Yes	230	http://www.grandseashostmark.com/MainP.htm
66	Iberotel Makadi Beach	4	27	1998	Makadi Bay	Yes	313	http://www.iberotelegypt.com/makbeach/index.htm
67	Iberotel Makadi Oasis	3	28	1998	Makadi Bay	Yes	318	http://www.iberotelegypt.com/makfamil/index.htm
68	Iberotel Makadi Saraya	4	27	1998	Makadi Bay	Yes	325	http://www.iberotelegypt.com/saraya/index.htm
69	Intercontinental Hurghada	5	8	2007	Hurghada	Yes	252	http://www.ichotelsgroup.com/intercontinental/en/gb/locations/overview/HRGHA
70	Intercontinental Abu Soma	5	45	2004	Soma Bay	Yes	445	http://www.ichotelsgroup.com/intercontinental/en/gb/locations/overview/asaeg
71	Jasmine Village	3	14		Hurghada	Yes	490	http://www.jasminevillage.com/
72	Jaz Makadi Star	4	27		Makadi Bay	No	167	http://www.jaz.travel/english/jaz_MakadiStar_discover.asp
73	King Tut	4	3		Hurghada	Yes	133	http://www.kingtutresorthrg.com/english/
74	La Perla	3	4		Hurghada	No	105	http://www.laperlahotel-eg.com/
75	La Residence des Cascades	5	44		Soma Bay	Yes	216	http://www.residencedescascades.com/index.html
76	Lamera Hotel	1	1		Hurghada	No		
77	La Pacha Resort	3	1	1997	Hurghada	Yes	258	http://www.lepacharesort.com/
78	Les Rois	3	3		Hurghada	No	240	
79	Lilly Land Beach	4	15	1994	Hurghada	Yes	522	http://www.lillylandbeachclub.com/index-

	Club							gb.html
80	Lotus Bay	4	49		Hurghada	Yes	220	http://lotusbay.com/index.htm
81	Magawish Village	4	10		Hurghada	Yes	425	http://www.swissinn.net/magawish/index.htm
82	Makadi Palace	5	26	2005	Makadi Bay	Yes	511	http://www.redseahotels.com/index.php?id=97
83	Marlin Inn	4	4	1994	Hurghada	Yes	290	http://www.marlininnbeachresort.com/
84	Marriott Hurghada Resort	5	4	1995	Hurghada	Yes	269	http://www.marriott.com/hotels/travel/hrgeg-hurghada-marriott-beach-resort/
85	Menaville Safaga	4	50		Safaga	Yes	310	http://www.menaville.com/
86	Meridien Makadi	5	27		Makadi Bay	Yes	1044	http://www.lemeridien-makadi.com/main.htm
87	Minamark Beach	3	1	1999	Hurghada	Yes	212	http://www.minamark.com/
88	Miramar Sindbad Hotel	1	4		Hurghada	No	650	
89	Mirette	4	2		Hurghada	No	196	
90	Moon Valley	3	2		Hurghada	No	70	
91	Movenpick Resort & Spa	5	24		El Gouna	Yes	554	http://www.moevenpick-hotels.com/en/pub/your_hotels/worldmap/el_gouna/overview.cfm
92	Nefertari Beach Resort	4	75	2000	Safaga	Yes	221	http://www.nefertarihotel.com/
93	Nemo Dive Club & Hotel	2	52		Safaga	No		http://www.nemodive.com/
94	Oberoi Sahl Hasheesh	5	17		Sahle Hasheish	Yes	102	http://www.oberoisahlhasheesh.com/en-US/Hotel/Hotel-Overview.aspx
95	Old Vic	3	4		Hurghada	Yes		
96	Palm Beach Resort	4	10		Hurghada	Yes	395	http://www.palmbeach-hurghada.com/
97	Palma de Mirette	4	2	2000	Hurghada	Yes	196	
98	Panorama Bungalows	4	24		El Gouna	No	166	http://www.panorama-elgouna.com/
99	Presidential Hotel	2	2		Hurghada	No	108	

100	Prima Life	4	26	2006	Hurghada	Yes		http://www.primalife-egypt.com/
101	Primasol Albatros Resort	4	12		Hurghada	No	681	http://www.pickalbatrosresorts.com/beachalbatroshurghada/index.htm
102	Princess Palace	3	7	1985	Hurghada	Yes	148	http://www.princess-hurghada.com/Princess_Palace.htm
103	Pyramisa Beach	5	21	2007	Sahle Hasheish	Yes	450	http://www.pyramisaegypt.com/pyramisaresortsahl/location.asp
104	Pyramisa Blue Lagoon	5	8	2007	Hurghada	No	324	http://www.pyramisaegypt.com/pyramisaBlueLaguna/location.asp
105	Ramoza New Hotel	3	2		Hurghada	Yes	60	
106	Reemyvera Beach	3	15		Hurghada	Yes		
107	Regina Style Resort	3	1	1992	Hurghada	Yes	420	http://www.style-group.com/rsh.asp
108	Robinson Club Soma Bay	4	45		Hurghada	Yes		
109	Roma	4	2	1998	Hurghada	No		
110	Rotana Coral Beach	4	17		Hurghada	Yes		http://www.rotana.com/reshurghada.php?&ppc=
111	Royal Azur Resort	4	28	1997	Makadi Bay	Yes	370	http://www.azurhotels.com.eg/English/arabia/Location.asp
112	Royal City Hotel	2	1	1996	Hurghada	No	56	http://www.royalcityhotelhurghada.com/
113	Royal Palace	4	5		Hurghada	Yes	195	http://www.royalpalacehotel.com/hotel.htm
114	Safaga Paradise	3	49		Safaga	No		
115	Safir	4	3	1992	Hurghada	Yes	141	http://www.safirhotels.com/default.aspx?pageId=29
116	Sahara Hotel Resort	3	3		Hurghada	Yes		
117	Sahara Resort	3.5	3		Hurghada	Yes		
118	Saint Maria	2	9		Hurghada	No	100	
119	Sand Beach	3	4		Hurghada	Yes	133	http://www.sandbeach-hurghada.net/
120	Sea Garden	3	1	2000	Hurghada	Yes	94	http://www.seagarden.com.eg/
121	Sea Star Beau Rivage	4.5	5		Hurghada	Yes	271	

122	Seagull Beach Club	4	1	2000	Hurghada	Yes		
123	Seagull Beach Resort	4	1	2003	Hurghada	Yes	710	http://www.hurghadaseagull.com/
124	Seahorse	3	4		Hurghada	No		
125	Seaview	2	4		Hurghada	No		
126	Serenity Makadi Heights	5	30	2007	Makadi Bay	Yes	510	http://www.serenitymakadi.com/makadi/index.php
127	Shams Imperial Hotel	5	49	2007	Safaga	Yes	324	http://www.shamshotels.com/imperial_shams_resort.asp
128	Sahams Safaga	4	49	1991	Safaga	Yes	340	http://www.shamshotels.com/Shams_Safaga_Hotel.asp
129	Sharm El Naga	2	39		Soma Bay	Yes		http://www.sharmelnaga.com/
130	Shedwan Garden	4	4	2003	Hurghada	Yes	282	
131	Shedwan Golden Beach	4	4		Hurghada	Yes	206	
132	Sheraton Miramar	5	25		El Gouna	Yes	339	http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=323
133	Sheraton Soma Bay	5	45		Soma Bay	Yes	310	http://www.sheraton-somabay.com/
134	Sherry Hotel	1	1		Hurghada	No		
135	Sindbad Al Mashrabiya	3	4	1997	Hurghada	Yes	194	http://www.sindbad-group.com/Hotels/mashrabia.asp
136	Sindbad Aquapark & Spa	4	4	1992	Hurghada	No	650	http://www.sindbad-group.com/Hotels/aqua_park.asp
137	Sindbad Club	4	5		Hurghada	Yes	1000	http://www.sindbad-club.com/
138	Siva Grand Beach	4	5		Hurghada	Yes	550	
139	Sofitel Hurghada	4	11	1995	Hurghada	Yes	312	http://www.sofitel.com/gb/hotel-1815-sofitel-hurghada-red-sea/index.shtml
140	Sol Y Mar Makadi Club	4	27	1998	Makadi Bay	Yes	270	http://www.solymaregypt.com/clbmakdi/index.htm
141	Sol Y Mar Makadi Marine	4	27	1998	Makadi Bay	Yes	145	http://www.solymaregypt.com/makdimar/index.htm

142	Sol Y Mar Makadi Star	5	27	1998	Makadi Bay	Yes	167	http://www.solymaregypt.com/makadistar/index.htm
143	Sol Y Mar Makadi Sun	4	27	1998	Makadi Bay	Yes	145	http://www.solymaregypt.com/makdisun/index.htm
144	Sonesta Pharaoh Beach Resort	5	16		Hurghada	Yes	360	http://www.sonesta.com/Hurghada/
145	Souvenir Hotel	2	1	2004	Hurghada	No	78	http://redseasouvenir.com/
146	St. Valentino	2	4		Hurghada	No		
147	Steigenberger Al Dau Beach	5	7	2006	Hurghada	Yes	388	http://www.steigenbergeraldaubeach.com/
148	Seighenberger Al Dau Club	4	8		Hurghada	No	246	http://www.steigenbergeraldauclub.com/
149	Steigenberger Golf Resort	5	24		El Gouna	Yes	268	http://www.steigenberger.com/aw/Steigenberger_Golf_Resort/~cqvh/
150	Sultana Beach	4	7		Hurghada	Yes		http://www.sultanabeachresort.net/
151	Sultan Bey	4	25		El Gouna	No	115	http://www.sultanbey-elgouna.com/
153	Sun & Sea Hotel & Suites	3	2	2000	Hurghada	No		http://sunandseaegypt.com/
154	Sunrise Crystal Bay	4	14		Hurghada	Yes	260	
155	Sunrise Garden Beach	5	14	2003	Hurghada	Yes	422	http://www.sunrisehotels-egypt.com/docs/resorts_garden_h.htm
156	Sunrise Holidays Resort	4	2		Hurghada	Yes	384	http://www.sunrisehotels-egypt.com/docs/resorts_holiday_h.htm
157	Sunrise Mamlouk Palace	4.5	14	2007	Hurghada	No	486	http://www.sunrisehotels-egypt.com/docs/resorts_mamlouk_h.htm
158	Sunrise Royal Makadi	5	26	2005	Makadi Bay	Yes	491	http://www.sunrisehotels-egypt.com/docs/resorts_royal_h.htm
159	Three Corners Ocean View	4	25		El Gouna	No	234	http://www.threecorners.com/elgouna_hotel/oceanview.php?page=location&hotel_id=3
160	Three Corners Rihana Inn	4	25		El Gouna	No	166	http://www.threecorners.com/elgouna_hotel/rihanainn.php?page=location&hotel_id=2
161	Three Corners	4	25		El Gouna	No	268	http://www.threecorners.com/elgouna_hotel/rih

	Rihana Resort							anaresort.php?page=location&hotel_id=1
162	Titanic Resort & Aqua Park	4	14		Hurghada	No	283	
163	Toubia	2	52		Safaga	No		http://www.toubia.de/
164	Triton Empire Beach Resort	3	4		Hurghada	Yes	136	http://www.threecorners.com/hurghada_hotel/empirebeach.php?page=location
165	Triton Empire Hotel	3	4		Hurghada	No	409	http://www.threecorners.com/hurghada_hotel/empirehotel.php?page=location&hotel_id=11
166	Triton Empire Inn	2	4	1968	Hurghada	No	73	http://www.threecorners.com/hurghada_hotel/empireinn.php?page=location
167	Turtle's Inn	3	26		El Gouna	No	28	
168	Waves Beach	3	2		Hurghada	Yes	160	
169	White Albatros	1	1		Hurghada	No	40	http://www.walbatros.com/
170	Zahabia	3	2		Hurghada	Yes	280	http://www.zahabia.net/
171	Zak	3	2		Hurghada	No	41	http://www.zakhotel.com/

Appendix D

Environmental NGOs in Egypt

African Society
Arab Office for Youth and Environment
Art and Society Group
Association for protection of the Environment
"Baladi" Society
Egyptian Red Crescent Society
Egyptian Society for the Development of Local Communities
Egyptian Youth Society for Development and the Environment
Friends of the Environment and Development Association
Friends of the Environment and Development Association, Alexandria
"Friends of the People" Society
"Khadra" Society for Development and Protection of the Environment
National Association for Protection of the Environment
National Society for Protection of the Environment, Qalubiya
Scientific Association for Arab Women
Society for Environmental Protection: "Friends of the Environment"
Society for Pollution Prevention and Environmental Protection (Beheira)
Society for Preservation of the Environment in Fayoum
Society for the Preservation of Nature
Society for Protection of the Environment in Assyout
Society for Protection of the Environment and Resources
Society for Protection of the Environment in Suez
Arab Organization for Human Rights
Association for Development of Services at Heliopolis
Community Service Society, Azbakeya
Egyptian Association for Health and Environmental Legislation
Egyptian Association for Industry and the Environment, Alexandria
Egyptian Packing and Development Association
Egyptian Society for Zoology
Egyptian Society for Zoonoses
Egyptian Society for Solar Energy
Egyptian Wildlife Society
El-Fath Society for Environmental Development, Suez
"Friends of Marine Life" Society
Integrated Rural Technology Center for Training and Production, Sharqiya
Productive Cooperative of Basaisa, Sharqiya
Society for Arts and Islamic Antiquities
Society for Beautification and Improvement of the Environment in Tanta
Society for Development of Services at Zamalek
Society for Health and Environmental Development
Society for Urban Development in Islamic Cairo
Tree Lovers Society

African Mutagen Society
Arab Society for the History of Pharmacology
Egyptian Botanical Society
Egyptian Society for Behavioural Medicine
Egyptian Society for Bio-Anthropological Sciences
Egyptian Society for Community Medicine
Egyptian Society for Earth Sciences
Egyptian Society for Entomology
Egyptian Society for Hereditary Sciences
Egyptian Society for Marine Sciences and Technology
Egyptian Society for Nutrition
Egyptian Society for Occupational Medicine
Egyptian Society for Pest Control and Environmental Protection
Egyptian Society for Poultry Sciences
Egyptian Society for Preservation of Natural Resources
Egyptian Society for Toxicology
General Society for Prevention of Bilharzias and Endemic Diseases
National Society for Technological and Economic Development
Society for Nutritional Science and Technology
Society for Plant Pathology

Source: Gomaa 1997