CHAPTER FOUR
Tourism and the Environmental Degradation
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4. Tourism and the Environmental Degradation

Introduction
This chapter is divided into two main topics: the first topic represents a debate about the tourism and environmental relationship. That discussion attempts to discover the reality of that relationship. In other words, it attempts to determine the cases of tourism development in which tourism and environment became in conflict or in symbiotic relationship. Multiple cases study are analyzed to proof such results.

Then the study proceeds through the discussion of the model of tourism product life cycle that is the second topic in this chapter. It attempts to analyze the model to derive the datum line at which tourism change its goals and begin to fail.

The case of Spanish coasts that are considered the worst environmental cases, deduce, according to that model, causes that lead to the conflicts between tourism and environment. Consequently, through this chapter, causes of environmental degradation happened due to tourism occurrence are determine.

Background
The history of tourism clearly indicates that the natural environment has contributed to the initiation and promotion of tourism. Scenic sites, amenable climates, and unique landscape features have had an important influence upon the patronage of specific localities, regions, or countries. The relationship between tourism and the environment is felt during all phases of the development process.

The waters of the Mediterranean are an important resource to the tourism industry of Italy, Greece, Yugoslavia, Spain, Tunisia, and France. Unfortunately, the Mediterranean is also a repository for municipal and industrial waste, for oil spills from tankers and for pesticides brought down by the rivers, which flow into the sea.

In swimming fishing and many types of boating, high quality of water is essential. The introduction of pollutants into water is both
environmentally damaging and economically disastrous for water-based tourist resorts.

Tourism development along the coasts of the Mediterranean is also responsible for large quantities of waste materials. It is difficult to distinguish between environmental changes induced by tourism and those induced by other activities. In such situation, tourism threatens to undermine the resource, which has been primarily responsible for its existence.

Tourism can provide an incentive for the restoration of ancient monuments and archaeological treasures, and for the conservation of nature resources as well as the economic means by which they can be achieved. However, tourism means people, congestion, noise, and litter. It means the disruption of animal life cycles, the extinction of fragile plants, and the pouring of human wastes into the sea and upon beaches.
4.1 Tourism and Environment Relationships

Three different relationships may exist between those promoting tourism and those advocating environmental conservation. This relationship is highly dependent upon natural resources.

1. Tourism and environmental conservation can exist in a situation in which both camps promote their respective position, remain in isolation, and establish little contact with each other. This situation is unlikely to remain for a long period because of the substantial changes in the environment, which are apt to occur with the growth of mass tourism. This stage, therefore, is usually succeeded by other symbiotic or conflicting relationships;

2. Tourism and conservation may enjoy a mutually supportive or symbiotic relationship where they are organized in such a way that each benefits from the other. From the perspective of the conservationist, environmental features and conditions are left as close as possible to their original state but, at the same time they provide benefits to the tourists who view and experience them. There are few places where this has been achieved;

3. Tourism and conservation can be in conflict, particularly when tourism induces detrimental effects to the environment. Most documented relationships between tourism and the environment fall into this category. On some occasions, effects of tourism have stimulated conservatory measures in order to protect fragile ecosystems. More commonly, the damage has already reached irreparable proportions.

4.1.1 Tourism/Recreation and Environment in Conflict

Tourism may also become in conflict with the environment. The destruction of coastlines, the pollution of waters: sea and rivers, from human wastes and detergents and traffic congestion. This chapter will discuss the impacts of tourism on particular environmental components. Aspects of the natural environment will be considered first, and will be followed by an examination of the effects of tourism on a number of different ecosystems.
4.1.1.1 Tourism impacts on natural environment’s components

Tourism and vegetation
Vegetation is one of the major attractions of many destination areas. Large grassland, forests or greenery in general, create beautiful scenes for tourist projects. In spite of vegetation being a primary tourist resource, it is important to mention tourist and recreational activities affecting vegetation. The collection of flower plants and, the careless use of fire in parks, the excessive dumping of garbage, the construction of campsites and the vehicular traffic could involve the removal of vegetation.

According to (Mathieson, A. 1982) the following can summarize the problem:

- Some vegetation cover in grassland ecosystems registers little deterioration because of its high proportion of resilient species. Hence, the effects of tourism will vary greatly from ecosystem to ecosystem.
- The reproduction rates of vegetation are greatly reduced in trampled areas.
- There is a strong relationship between soil and vegetation. Soil compaction will influence plant growth and the age structure of vegetation.

In Egypt, large tracts of fig trees were covering the hinterland of the north West Coast. These tracts are disappearing because of tourist development of this region, especially at El Agamy and its surrounding areas (Amer, E. 1987). Such productive trees were not only representing beautiful scenes and considered as a natural important resource; they were also protecting the region from the sandy winds coming from the southern desert. Because of such situation, the sandy dunes are menacing the high way of Alexandria – Matrouh, and the tourist development at the region by consequence.

However, it is important to note that vegetation’s damages, which occur, as the result of tourism development is less than the damages caused by other development such as, industrial and urban development.
Tourism and water quality
In the Mediterranean region, water pollution has reached crisis proportions in several of the older tourist resort. There is a real threat that this could occur around the Mediterranean. Tourist developments along the coast are responsible for large quantities of waste materials. Accordingly, tourism threatens to undermine the resource, which has been primarily responsible for its existence. For activities such as swimming, fishing, and many types of boating, the need of high quality water is essential. The introduction of pollutants into water bodies is both environmentally degrading and economically disastrous for water-based tourist resorts (Mathieson A. 1982).

Tourism and air quality
As tourism involves traveling, normally by motorcar, ship, train, bus or airplane, the contribution of each to air pollution is intrinsic. Although the contribution of tourism to air pollution may be less than for some other forms of human activity.

The airlines are a major mode of travel for international tourists. Studies undertaken London’s Heathrow airport, and at Tokyo and Los Angeles (Mathieson, A. (1982)), showed that carbon monoxide levels were less than one third of those recorded in the downtown areas of those cities. On the other hand, the creation of parks and gardens for tourism purpose could be a factor enriching environment and protecting air from pollution.

Tourism and wildlife
Hunting animals and, more recently, the viewing and photographing wildlife are important tourist activities. Such activities may cause some impacts on wildlife.

The direct effects of tourist activities on wildlife depend largely upon the intensity of tourist development, the resilience of species to the presence of tourists, and their subsequent adaptability. Some of the major effects, which have been mentioned in the literature, as follows (Lipietz, A (1995)):
The pressure of tourists taking photographs has caused a noticeable decline in the breeding success of many species of coastal birds.

- The chasing of animals has increased markedly in recent year, and the erratic behavior of some divers caused great damage to the coral reefs and scared fish and animals.
- The development of highways and urban areas in areas, which were, traditionally feeding and breeding areas such as forests and natural grassland, has forced wildlife to relocate.

Tourism and geology

Information on the effects of tourism on geology is scarce. There has been occasional mention of the impact of collectors of minerals, rocks and fossils, and in some areas the stripping caves of their natural formations has become a serious problem. Damage has also occurred to the coral reefs, and in areas of unique features, it consequently would be a major problem in coastal tourist areas.

4.1.1.2 Impacts of tourism on ecosystem

Coastlines:

In addition to tourism, coasts are also sites for other activities such as ports, power generation, and refineries. Thus, tourism adds to stresses, which are already imposed upon fragile coastal resources. Most effects of tourism have been largely negative because of inadequate planning. Detrimental effects include the elimination of some plants, animal habitat, the obliteration of geological features, by excavation, water pollution, and a diminution in the aesthetic qualities of scenery. These acts lead inevitably to a reduction in the attractiveness of the resources itself: the disposal of wastes in the water of many resort beaches has reduced the bathing and boating potential of those areas.

The large number of marine constructions and marinas, if they are not located according to comprehensive studies based on a simulation of the water currents and the sea reactions, can cause an inevitable erosion and pollution of the coasts,
The coastlines of Spain provide numerous examples of the deterioration and the destruction of natural ecosystems from unplanned tourist development. Concrete walls along the Costa del Sol are an example of what has been required in the past and what should be avoided.
Large-scale tourism has invaded the Mediterranean coasts and, is converting this sea into a dead sea where people will soon be unable to bathe unless they want to catch some disease.
Tourism, which has been so helpful in bringing foreign exchange to the countries along the Mediterranean shore, is, in the long run, destroying the sources of its success.

**Fig. 4.** Coast erosion and the huge sea breakers

*This scene is frequently seen along the Mediterranean coasts. The breakers are trying to stop erosion caused mainly by another marine man made construction*

*Source: Coastline amenity development for tourist and leisure activities*

Coastlines are key areas where planning measures and land-use controls must be implemented if that environment is to make a lasting contribution to the tourist industries. Attention must be devoted to environmental health and the purification of wastewater, to the prevention of development on unstable areas such as dunes and eroding cliffs, and to the regulation of aesthetically unpleasing architecture.
Mountains have attracted tourists for several centuries and they have been the location of a large proportion of national and other park developments. With the emergence of mountain and upland recreational activities, such as skiing, climbing, and some forms of hunting, these environments are being more intensively used. Previously remote and inaccessible areas are being opened to the influence of tourism. The diversity of vegetation is of great importance to mountain wildlife for both food and protection. (Theobald, W. (1994))

The disruption of these life zones by tourist accommodation, ski lifts, cable-cars, access roads, power lines and sewage systems are, in effect, squeezing the life zones into even more compact conditions and, on some occasions, even obliterating one or more of them. Roadways alter drainage patterns and run-off them can pollute streams. Being both highly attractive and ecologically valuable, but have low resilience to the impacts of mass tourism; such special environments pose difficult, but urgent questions for environmental protection.

4.1.1.3 Impacts of tourism on man-made environment

Natural attractions, by themselves, are insufficient to satisfy the tourist, for they must be complemented by other tourists facilities and supporting infrastructure such as tourist resorts of different forms, hotel development in cities and second home development in rural areas. One of the most obvious environmental effects of tourism is the development of these facilities and infrastructure. From the limited research that has been undertaken, the following impacts are the most prominent effects: (Mader, V. (1988))

Fig. 4.2 Shows attractive pattern and urban feature in Tunisia Coast

The picture shows a very traditional feature and architecture that enhances the culture and social heritage. It is clear that man made environment plays an important role in defining features and improving culture

Source: The environmental Magazine (1997)

Visual pollution
There has often been a failure to integrate resort infrastructure with aesthetically pleasing characteristics of the natural environment. Large, dominating hotel buildings are often out of scale and clash with their surroundings. It is the inevitable result of the juxtaposition of buildings in widely different architectural styles. The failure to incorporate adequate environmental considerations into the architectural design of hotels, dinning, and entertainment facilities could lead to consequences that are both aesthetically unpleasant and economically unprofitable.

**Ribbon development and sprawl**

Coastal resort development, particularly in the absence of planning regulations or restraints, has tended to sprawl along the coastline. This is the response to the need to take advantage of the beach as a primary resource, and because of the availability of less expensive land for building. Ribbon development has also occurred along valleys and scenic routes in inland areas. In many cases, the development has been of low quality and has left unoccupied for most of the year.

In many resorts, infrastructures are unable to cope with the intensity of tourists’ visitation at the peak period of the year. The result is supply failures, pollution, and health hazards. This problem results from the seasonality of tourist activities on the coasts. This seasonality is the consequence of the interest in water-based activities that mainly stop working in winter because of the weather. That fact increases the gap between the number of visitors throughout the year. The planning that is based on the peak season conditions is economically considered as waste of resources, particularly, when the peak season is just two months as it is the case of NWC of Egypt and most of the resorts in the Mediterranean region.

Segregation of local resident
The special separation of tourist areas from the rest of the resort, or the surrounding countryside, makes for social segregation. The mass tourist may be surrounded by, but not integrated with, the most society. Separation is clearly seen in cases where tourists enjoy special facilities which are unavailable to resident, or where resident go to areas other than the core for their recreation or purchase of goods. This situation may be aggravated by the line of heigh-rise hotels, which may constitute a physical barrier, both visual and real, between the inner residential zones and the prime attractions of the core areas.

Traffic congestion
This has emerged as one of the most serious consequences of resort development. For example, in the Swiss holiday resorts, this problem is felt the most.
According to Haywood, K.M. (1988) The traffic problem takes three forms:
a- The mutual obstruction of different modes of traffic, particularly the conflict between pedestrians and motorcars.

b- Traffic overload and congestion at key points within resorts, specially at access points and in the main street of the core area.

c- The discrepancy between the demand for and availability of parking space. Parking space is required by excursionists in close proximity to points of attraction, by tourists at hotels, shops and restaurants, and by local inhabitants at their places of residence and work. The lack of unused space in resorts and the high cost of providing such facilities have been major factor contributing to the imbalance between supply and demand.

Remedial measures to alleviate such secondary effects as traffic congestion, visual pollution and inflation, have met only mixed success. In absence of adequate legislation and planning controls, the development of tourist infrastructures has been left largely to the interplay of market forces. These have failed to ensure that adequate attention has been devoted to environmental and social concerns, and have induced conflicts between developers, local residents, and tourists.

4.1.2 The Symbiotic Relationship between Environment & Tourism and Recreation Development

According to Mathieson, A. (1982) conservation grew from four independent roots:

1- The demand for parks and open spaces is stimulated after the growth of industry and commerce and their associated ills. The provision of public land was seen as an antidote to the immoral values of urban society and as an escape from the routine of work and urban living.

2- There was an emphasis on the efficiency of resource use, particularly of non-renewable resources. Early expression stressed maximum utilization but with a minimum environmental degradation. The current definition of sustainable tourism provides more protection of resources as will be shown in the third part of the study.

3- Conservation also incorporated a notion of aesthetic enhancement. This is particularly significant in a recreational context. One major tourist activity is sightseeing which depends heavily on the qualities of the natural environment.
4- More recently, conservation has gained a scientific and ecological emphasis in which the maintenance of a balance between man and environment is of prime importance. The outcome of this perspective is the application of stringent controls to protect and preserve the natural environment from unsystematic and unplanned human manipulation.

Conservation and the preservation of natural areas, archeological sites, and historic monuments, have emerged as important spillover benefits of tourism. In turn, the protection of these prime tourist resources enhances and perpetuates tourism by maintaining its foundation. The tourist industry has as much interest in maintaining a quality environment as organizations specifically dedicated to that cause. The following part demonstrates example of tourism development in symbiotic relationship with environmental conditions.

**Conservation Planning Concepts**

Generally, in countries, which are sparsely populated, the main facilities may be conveniently located in the core of extended parks. However, in densely inhabited countries, they have to be located at the periphery of smaller parks. In planning terms, this may be presented by the principles of concentric zoning Lawson, F. (1998) Fig .4. 5 shows the principle of concentric zoning for natural sanctuaries protection.

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1. Dense facilities (peripheral zone): maximum convenience and economic benefit.
2. Natural environment (buffer zone): controlled traditional human activities.
3. Special natural reserve: no human activities, wild nature.
4. Natural sanctuaries.
5. Natural monuments (not within the park).

*Source: Lawson, F. 1998,*
A. National Parks in Japan

The Japanese national park law distinguishes national, Quasi-national, and perfectual natural parks. In densely populated Japan, most parts of the land are cultivated. This case represents the typical case of conservation of natural reserves through tourism development plan.

![Map of Rishiri Island National Park](image)

*Fig. 4. 6 Map of Rishiri island national park, Japan*
*Source: Lawson, F. (1998)*

Therefore, the national parks cover not only state-owned (mostly national forests) and local government-owned land but also much privately owned land.

The regulations for the protection of the park and the implementation of activities or facilities inside its boundary are defined by the Environment Agency and reviewed about every five years. The proposed zoning classified the park into zones (special protection zones, special marine park zone, and ordinary zones). It takes into consideration the natural grades of ecosystems and scenic beauty, the degree of human impact into the natural environment and the importance for visitor use.
Tourism can also be credited with extending environmental appreciation. The tourist industry has discovered, made known and rendered accessible, specific regions and aspects of nature.

**B. The Eden Project, Cornwall, UK**

An ecological center, that is to be created in a 14 ha derelict clay pit near St Austell, in Cornwall, consists of half mile long greenhouse enveloping four controlled ecological Zones (Mediterranean, desert, rainforest and sub-tropical).

Visitors would arrive by a shuttle bus from the car park, descend to a visitor center, cross a bridge over the pit floor to enter the Mediterranean section, then the Tropical, then the next, with restaurants and service spaces at each junction. In the rainforest

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**Diagram 4. 1 shows zones and regulations in the national parks in Japan**

![Diagram](image-url)
section up to (30 meters high) several paths, some well above ground level, will allow visitors to appreciate the ecologies of different levels.

Fig. 4. 7 shows the proposed project of ecological protection (Eden project) designed by: Nicholas Grimshaw & Partners

*Source: Lawson, F. (1998)*

The project is proposed as a candidate for major funds from the Millennium Commission
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Fig. 4.8 section showing the rainforest ecological zone protected through the Eden Project

Source: tourism & recreation; hand book of planning and design

As the Eden project represents a way for environmental improvement, in Switzerland, another example will be discussed. For example, mountain vacations in winter were relatively unknown until after the development of mountain railways and sports resorts.

C. Anzere Ski Resort, Switzerland

This resort was planned for a total 7500 beds, 3500 being built in the first phase. In 1997, 50 % of the beds were private apartments and 40% are available for rent, and 10 % of beds in hotels.

The main resort is characterized by large chalet-type condominiums built around a square, with shops and recreational activities (indoor swimming pool, ice skating and curling rinks, and trails for skiing) located in the basement linked by pedestrian arcades.

It's important to note that such development is the main cause of the transformation of that area to a tourist destination area, and accordingly, insure its maintenance.
Fig. 4.10 shows the Anzere ski resort plan and its location on the mountain.


In Canada, a similar example can be found. Ecotours in the Canadian tundra, an area not visited previously by people other
than scientists and hunters, is becoming an important site to be visited.

**D. Park de Frontenac, Québec ; Canada**

Park de Frontenac is a recreation and nature park and was created at the beginning of the 1980s along the large lake of St-François, following the studies undertaken in 1967. Within less than two hours drive 1.5 million people have access to the park.

The park (155 km²) is public land but surrounded by private agricultural properties, which have limited its extension. Its main resources are the lakes, maple forest, peat areas and conifer forests on marshy land, and a rich fauna.

The development plan in 1985 distinguishes:

- Two preservation areas (access limited to a few trails)
- Few intensive small recreation areas with facilities for parking, camping, swimming, sailing:
- The rest of the park, essentially for excursions by foot, horse or canoe, with very light facilities only, along the trail system.

In absence of an attractive environment, there would be little tourism. Ranging from the basic attractions of sun, sea and sand to...
the foundation of the tourist industry. Tourism, if it is to be successful and sustained, actually requires the protection of the scenic and historical heritage of destination area. The protection of such prime attractions has come to be viewed as an investment as the economic potential of tourism has become widely recognized. This is also a compelling reason for planning and development agencies to concern themselves with environment issues. Conservation and preservation measures can be presented to the public as being economically necessary and not simply as a means of satisfying tourist demands. Actually, it is very difficult to identify the net responsibility of tourism development on the environmental degradation. Tourism development is a part of large phenomena of development, including policies of development on the national level, infrastructure, and management. In fact, it cannot be denied that tourism development plays an important role in enriching the environment and the visual scenes in areas of poor values in order to attract more visitors. It is revealed in many tourist projects where the addition of artificial lakes or parks, golf courses, and many other activities, add positively to the environment.

**E. Suburban park in Wienerberg, Austria**
The large park (85 ha) has been created on disused clay quarries and brick works which had been used for domestic refuse disposal. Quarrying and deposits have left traces on the landscape, which still characterize the site. Wienerburg was designated a forest and meadow belt protected area by City of Vienna in 1975. At the city’s edge, surrounded by satellite towns and lower density residential development, it provides the nearest countryside recreation area for the 160000 inhabitants living in the south of Vienna.

Fig.4. 12 the new scene of the park after development
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The contrast between its moist low areas (with a lake of 16 ha) and its dry mounds has been maintained. The existing vegetation retained and extended with natural (11 ha) grazing lands and reforested areas (14 ha). Today the area is open to pedestrians only (with bicycle at the periphery). Amongst the few facilities there are: Paths (a few paths only being planned and constructed; subsidiary paths and tracks have been created by the users of the park); Sitting areas, playgrounds and day camping (in boundary areas only).

Fig. 4.13 The master plan of the park in Wienerberg, Austria planned by: Marja Kirchner, Vienna

Source: Bauvy, B. 1977

Then, the challenge in tourism and recreation development is not only, to prevent the negative impacts on the nature and the environment, but also to add positively to it.

After discussing the relation between tourism development and the environmental degradation, it is important to search for the way to cope with this conflicting relationship. To do so, we need to explain the dynamics of tourism growth, its actions and relationship with the environment at every stage of growth. A model scenario of the tourism growth explaining the Cuban case can be utilized as a general model of tourism growth.
The following sections will trace the trajectory of tourism development while this model could have applications in a variety of countries -
4-2 Tourism Products Growth Models

There exist several evolutionary stage models which attempt to describe the common development trajectory followed by conventional international tourism areas. While these models tend to be linear and are not predictive, they do provide insights into the common pattern of rise and decline of international tourism resorts.

4.2.1 Tourism Product Life Cycle

Butler 1997\(^1\) provides a six-stage model of the evolution of a tourism area based on marketing theory product life cycle (see diagram 4.2)

During the early 'exploration stage' of the cycle a small number of unobtrusive visitors arrive seeking 'unspoiled' destinations. These early 'explorer' tourists generally speak the language and identify with the local culture. The social impact in this stage is generally small and resident attitudes are fairly positive towards tourism.

During the second involvement stage the number of incoming tourists increases. The host community responds to the increasing numbers of tourist by providing facilities. Entrepreneurial activities remain family based and the visitor-resident relationship is still harmonious. Later in this stage as the demand for tourist facilities grow, the community may borrow from outside sources for expansion and 'entrepreneurs' will rise in the community.

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\(^1\) 1997, Rebecca Torres, development and environmental conservation in Cuba, University of California, Davis
The third development stage is reached as visitor numbers increase and the community becomes a tourist resort. Outside interests become involved in developing businesses and tourist facilities.

Migrant workers attracted by the prospect of tourist-related jobs may enter the community and reduce resident contact with visitors. The tourist-relationship is converted into one of business as the novelty of new visitor arrival declines. The more culturally sensitive 'explorers' have moved to new 'unspoiled' areas and are replaced by the mass market.

As the resort becomes less fashionable the growth of the industry may decline and enter the 'consolidation' and 'stagnation' stages. During these stages resort owners attempt to maintain visitor volume as revenue per tourist has dropped with the loss of 'exclusivity'.

Finally falling profits lead to the sixth stage of decline. Tourism investors and tourist leave that areas trying to attack new land and the community is left to 'pick up the pieces' (Butler, 1980).

4.2.2 Relative Transformations During the Different Stages of Destination Life Cycle

Conventional tourism development may also be viewed in terms of key stakeholder inputs and outputs. The government generates revenues from the tourist resort, while also fulfilling its role of stimulating "economic development"

In the conventional investment scenario the primary development plan of tourist core offers generally, a modern resort hotel. It provides management expertise and experience to the resort but often brings its own people for high paid management positions.

Second tier management positions may be filled by nationals imported from the capital city. The lower paying service jobs remain for local residents. Although the actual investment concentrates on a small portion of the region (the resort hotel), there is an assumed value derived from the entire surrounding environment. In the minds of the investors they are purchasing the surrounding beach, reef, forest, wildlife and community assets (i.e.: historical sites, local customs).
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In the conventional development scenario local small business development follows the major investment after a lag period.

The resort becomes a magnet for opportunistic, and often corrupt, entrepreneurs from urban centres seeking to tap into the incoming tourist dollars. These small businesses develop in an uncontrolled and unplanned manner to tap into the larger tourism industry through retail, local restaurants, taxi services and cheap accommodations. It is often these small-unregulated businesses that will indiscriminately exploit the local environment for short-term gain. This may be a point of conflict with the planned tourism development, which considers the local environment part of its assets.

Environmental degradation significantly lowers the value of resort assets. Generally the beneficiaries of these businesses are outside entrepreneurs and local elite. Poorer sectors of the community may benefit indirectly from this small business sector through low paying jobs (usually lower paying than resort hotel service employment).

In the conventional investment scenario the local citizenry is the most alienated stakeholder group from tourism industry benefits. Benefits to this group rarely exceed the availability of low paying jobs. Even
this benefit is questionable given the large influx of outside labour, which normally follows the establishment of a major tourism resort. Normally this group has little input into the tourism industry and virtually has no input into the planning or decisionmaking of local tourism developments. This majority group derives the fewest benefits from tourism, yet is often the most negatively impacted.

Diagram 4.4 presents the long-term results of the conventional investment scenario. Both the inputs and outputs of the planned tourism development have diminished as the ageing resort area declines. With the loss of exclusivity and the environmental deterioration, the resort area becomes less attractive to high value tourists. The resort is therefore forced to attract mass tourists who generally bring in relatively fewer dollars per tourist. As a result of the declining value of the area, the tourists begin to change their destination from the ageing resort area to new developments in more pristine areas.

Diagram 4. 4 shows scenario of resource degradation and the tourist development set back

Conventional Investment Scenario (Late)

| Government Infrastructure |
| Roads |
| Water |
| Air terminal |
| Electricity |
| Sewage |
| Police |
| Banking |

| Small Businesses |
| Small Production & Retails |
| Restaurants |
| Private transport |
| Poor accommodations |

| Legend |
| Investments/Inputs |
| Revenue/Income |

| Tourist Inputs |
| More tourists but less receipts |

| Foreign Direct Investment |
| Resort Hotel Promotion |

| Actual foreign direct investment |

| Polluted Beaches and offshore assets |
| Dammaged community asset and social problems |
| Dying Forest and wilderness |

| Local Citizen |
| Cottage industry labor |

Source: Butler, R., 1997
Therefore there is a vicious cycle - as the environmental resources, which initially attracted the resort decline, the resort seeks to attract larger numbers of the lower value tourist through discounts and package deals to maintain profit levels. This larger number of low-end tourists accelerates environmental decline by producing more waste and pollution, and increasing tourist traffic through reefs, beaches and forests. The lower paying mass tourists also attract the influx of tourist-relate small businesses catering to the low-end market. These small businesses often exploit resources such as forests, reefs, beaches fish and wildlife to serve the incipient mass tourists. As resources decline, there is a "feeding frenzy" to extract profits today because clearly there will be no tomorrow.

In this later stage of the conventional investment scenario, the local citizenry suffers a decline. Virtually excluded from the majority of direct benefits from the tourism industry, poorer sectors of the community find new sources of income in panhandling, prostitution and petty crimes. The resort area also attracts outside elements, which foster crime and prostitution in the community. Local culture is often commercialised and distorted to fit the tastes and expectations of the undiscriminating "incipient mass" (Smith, 1989) tourists. Perhaps the most glaring examples of negative cultural impacts of tourism are manifested in local arts and crafts. Indigenous art production is transformed from 'functional traditional art', often with religious meaning, to a type of 'airport' art devoid of meaning, which trivializes local culture (Harrison, 1992).

This conventional tourism investment scenario has been played out countless times throughout the world. There exist key flaws to the model, which inevitably lead to decline of the resort and environment and community assets.

Perhaps the principal weakness to this model for conventional development is that the environment is considered a "free good" by all stakeholders. Often the ownership rights of environmental resources surrounding resorts such as beaches, reefs and forests are unclear. The belief of using rights of surrounding nature resources, as free goods can be one of the major important aspect of environmental failure, especially when there has been no direct control or mechanisms to stop the damage. However, as mentioned earlier, governments have proven to be largely ineffective in protecting resources given their lack of resources and often rampant corruption. Also, governments often have their own agenda to extract fishing,
wildlife, petroleum, and forest resources to generate revenues. Local communities have little incentive to protect the environment, as they are themselves often struggling at the margin to derive what little benefits they can from the tourism industry which often translates into exploiting the environmental "free good". Moreover, the neglecting of the important role of the local culture and the resident participation in the tourism development contribute to its failure.
The cycle of growth of tourism and recreational products as discussed above is in fact applied in most tourist areas when inadequate development is established. Similarly to the Cuba example, the interest of the water based activities, with the neglect of the role of social culture, and other attractions in tourism development at the Mediterranean region, might cause the narrow linear strip development along the coast. Due to its natural environment, the Mediterranean coast attracts enormous numbers of tourists. Countries become obligated to be involved in great competition to attract more visitors in order to solve their economical problems. The competition in many cases, especially in Spain, is based on the supply of more beds with minimum expenses. These situations lead to the mass tourism phenomenon, where facilities and services are inadequate to the tourist
number, specially, with the seasonality problem. In the Spanish coasts, the number of visitors to the residents’ ratio is 3 to 1; which affects infrastructure, services, and facilities. Beaches become overcrowded, and the waters polluted, and the linear strip becomes over developed. At this Stage the curve of the tourist product begins to decline with the affection of the environment and the inadequate facilities.

At present, the Mediterranean coast of Spain, face a very critical situation, that affects its rank as an important destination, especially with the new trends of “New-Land tourism” and competition from the Caribbean, and Asian coasts. Therefore Spain tries to establish new policies to solve this problem.

According to the above argument it is important to evaluate the development of the Northwest Coast of Egypt, in order to cope with the decline in the tourist product, which will be carried out in the next chapter.

**Fig 4.14 Aerial view Costa Brava**

The Costa Brava was isolated topographically, and was not joined to any large city, even Gerona further inland.

The form of tourism in this area was either typically reflected in large densely settled resorts, comprised of high-rise hotels and apartments; or as sprawling subdivisions of villas known as urbanizations.

That tourism loss is a tragedy that replicated in many coastal areas along the Mediterranean, and that can explain the displacement of tourism demand from the traditional resort such as AL Maamorah, Ras Albar, and at AlAgamy recently, to the Northwest coast of Egypt. The application of that model on the Egyptian Northern coasts will be analyzed in chapter eight.
Findings & Conclusions

- Tourism and recreational activities are responsible for the environmental degradation. To control the environmental degradation due to the tourism development, a relationship discussion was presented.

- Tourism exhibits two contrasting relationships with the environment. Tourism may exist in conflict with the environment: the trampling of vegetation, the pollution of resort beaches, and the irresponsible behavior of tourists disrupting the feeding and breeding habitats of wildlife are examples of this conflicts. The concentration of tourists' facilities in resorts has induced pressure on land use, infrastructure, overloading, traffic congestion, and the segregation of tourists and residents.

- A symbiotic relationship exists when the interacting sets of phenomena are mutually supportive. The roles of tourism in the creation of wildlife parks and preservation of historic buildings are examples of this relationship. The Japanese national park set different level of criteria controlling development around natural reserved area provoking recreational related activities. Such concept offers ways to afford maintenance of reserved area or cultural heritage.

- This chapter concludes that in addition to the fact that tourism and the environment are in conflict, tourism may also support the environment: tourism development create beautiful scene and positive environment when the developed site has poor scenic conditions. The creation of golf courses, the artificial beaches the creation of artificial parks are examples of the symbiotic relationship between tourism/recreation and the environment. This positive action is clearly demonstrated in the case of the creation of recreational park on disused clay quarries and brick works, in Wienerberg, Austria.

- The risks are particularly acute in areas of rapid, intensive tourist growth and in delicate, special environments. As coastal zones are considered sensitive areas, the development control on coasts is then the most important...
step in the development process, in order to keep that symbiotic relationship.

- By analyzing the model of growth of tourism development in the Cuban Case, it concludes six stages of destination life cycle related to changes that occur to the environmental qualities. The study explains that at the long term of uncontrolled development, with the environmental deterioration, the tourist-developed site becomes less attractive, and tourists change their destination from the ageing resort to new developments.

- Once applying the growth life cycle on sites of tourism development on the Mediterranean coast, it can be conclude that tourism development in the Mediterranean coast will face a decline in the future if there is no serious preventative policies are taken

- From the above, it can be concluded that:
  A-Tourism development has also dynamic characteristics similar to the dynamic nature of the environment.
  B-Their relationship can be defined as successive actions and reactions from both sides.
  C-As tourism growth has an impact on the environment, environmental degradation deteriorates tourism.
  D-These dynamics have to be considered in the planning process and in the strategies of development on the coasts and in the creation of the whole tourist image of a site.

- With the growing awareness of conflicts between conservation and development, planners should reorient their emphasis from planning the environment for tourism, to defending the environment from the negative impacts of development, which is the only way to create successful sustained development.