CHAPTER FOUR: TOURISM-RELATED DEVELOPMENT IN CRETE

4.0 INTRODUCTION

During the 1970s, many Greek islands realised dramatic changes in their economic base. After many decades, with an economy driven by agriculture, fishing and navigation, demand for holidays from western Europeans turned their activity to tourism as a development strategy to improve their economy and break out of the cycle of deprivation. One of these islands is the island of Crete where tourism has played a major role in the development of the local economy.

Although tourism in Crete is not very recent, it is only in the past two decades that it has grown significantly. The existence of basic infrastructure, the Cretan natural beauty, good weather, culture, heritage and tradition, as well as the maturity of competitive island destinations in the Mediterranean, are the main components of Crete's continuing tourism growth. Today, foreign tourism has been transformed into a primary source of income for the island, although social and environmental problems have emerged, mainly due to mass tourism development and inattentive tourism planning.

The aim of this Chapter is to apply the tourism development process framework, provided in Chapter Two, to the case of Crete, by examining supply, demand and physical data relating to the growth and structure of the Cretan tourist industry, and by presenting the outcomes of tourism development for the island and the local population. By doing this it is attempted to investigate the development patterns of the island, so as to understand which approaches of development are applicable to Crete and how the development of the island has influenced the local community.

4.1 DEMAND ASPECTS OF TOURISM

4.1.1 Tourist arrivals

Centuries ago travellers, artists and men of letters (Sieber, 1823; Pashley, 1837; Spratt, 1865) were fascinated by the art, history and literature of Crete, and the Greek legends of 'gods and heroes' (Boniface and Cooper, 1987). However, before the Second World War, tourists to Crete numbered only a few thousand. As (Basil, 1964) reports approximately 23,000 tourists visited the island in 1962.

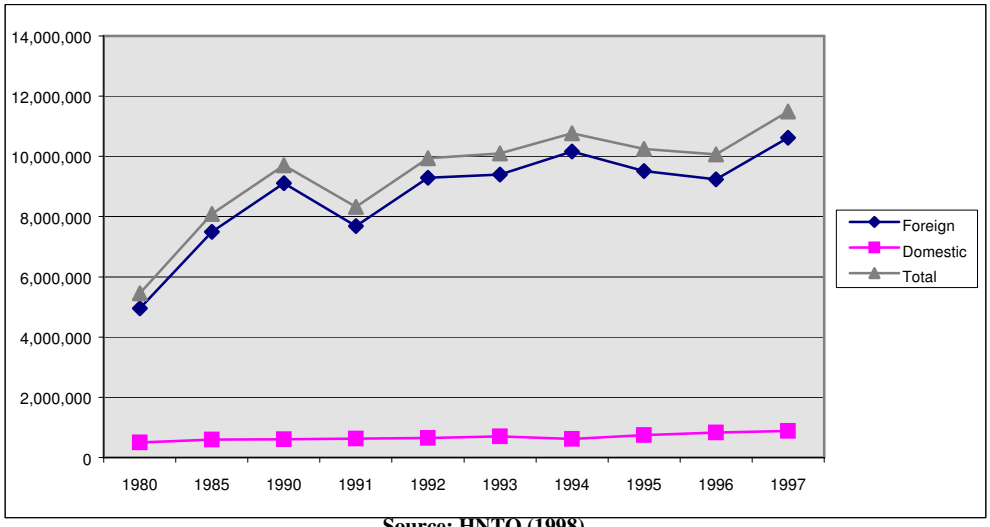
In the initial stages of the island's tourism evolution, non-institutionalised types of tourists were attracted (explorers and drifters), who, according to Cohen (1972) and Smith (1978), are the first visitors to discover most tourist receiving destinations. As Greger (1988) notes for Crete, only "small numbers of archaeologically or classically educated foreigners came on what amounted, for them, to a sacred pilgrimage" (p.112).

The number of tourists started to increase only after 1960. The reasons for the delay were mainly the distance of the island from western European countries (before the introduction of rapid air travel), the low level of infrastructure and poor communications of an island which was in a series of wars between 1821 and 1950.

Crete has recorded the largest increase in tourism bednights of all Greek regions. In 1980, the number of nights spent by foreign tourists was 4.9 million, 16.7 percent of the national total, although 17 years later, the number had increased 114 percent to 10.6 million, 26.5 percent of the national total (Table 4.1). During the same period, the increase in the number of total bednights nation-wide, was much lower (35%). The highest increase of bednights has been recorded in the Prefecture of Chania (almost 500%) and the lowest in the Prefecture of Lassithi (39%). As far as bednights of domestic tourists are concerned, they have increased only 75 percent from 1980 to 1997, with the highest increase in the Prefecture of

Chania (134%) and the lowest in the Prefecture of Lassithi (46%). Bednights of domestic tourists in 1997 accounted for only 7.6 percent of the total bednights spent on the island, although the share of Crete in Greek bednights for domestic tourism was 6.6 percent. However, any reference made to statistics of domestic tourists should be taken under concern since as Leontidou (1998, p.113) remarks domestic tourism in Greece is difficult to measure, because domestic tourists usually prefer room to let, the houses of relatives, and second homes. In 1997, the Prefecture of Heraklio recorded almost half of the total bednights spent in Crete, and Crete had a share of 21.5 percent of total bednights spent in Greece (Figure 4.1).

Figure 4.1: Bednights of foreign and domestic tourists (1980-1997)



Source: HNTO (1998).

Table 4.1: Bednights (1980-1997)

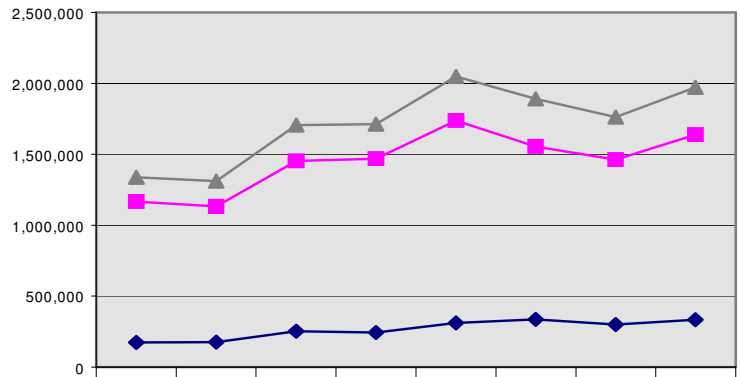
	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	Change 80/90	Change 90/97	Change 80/97
F O R E I G N T O U R I S T S													
Heraklio	2,894,270	4,192,530	4,856,579	3,990,740	4,982,842	4,682,935	5,010,581	4,303,003	4,413,687	5,382,964	68	11	86%
Lassithi	1,238,396	1,776,923	1,767,333	1,506,771	1,868,357	1,694,703	1,745,992	1,574,013	1,526,143	1,720,449	43	-3	39%
Rethymno	592,708	1,052,788	1,514,979	1,268,179	1,478,593	1,869,081	2,210,988	1,970,914	1,762,438	1,851,765	156	22	212%
Chania	277,586	469,889	967,872	922,607	960,733	1,146,380	1,191,144	1,660,878	1,539,278	1,663,484	249	72	499%
Crete	4,952,960	7,492,130	9,106,763	7,688,297	9,290,525	9,393,099	10,158,705	9,508,808	9,241,546	10,618,662	84	17	114%
Greece	29,596,704	35,709,851	36,935,049	30,739,587	37,553,491	37,186,100	41,199,694	38,771,623	35,497,515	39,996,655	25	8	35%
Crete/Greece	16.7%	21.0%	24.7%	25.0%	24.7%	25.3%	24.7%	24.5%	26%	26.5%			
D O M E S T I C T O U R I S T S													
Heraklio	246,492	335,099	310,365	297,396	314,773	345,248	318,143	387,854	368,972	392,998	26	27	59%
Lassithi	81,572	88,276	96,578	104,523	110,875	87,819	66,474	94,531	119,928	119,082	18	23	46%
Rethymno	55,108	46,865	43,120	57,530	48,816	57,151	50,979	62,285	87,602	89,508	-22	108	62%
Chania	117,653	129,890	153,111	172,285	169,955	210,420	177,617	196,100	251,853	275,618	30	80	134%
Crete	500,825	600,130	603,174	631,734	644,379	700,638	613,213	740,770	828,355	877,206	20	45	75%
Greece	10,757,450	11,307,335	11,952,534	11,900,224	12,419,620	12,406,146	12,235,417	12,552,573	12,814,889	13,372,852	11	12	24%
Crete/Greece	4.7%	5.3%	5.0%	5.3%	5.2%	5.6%	5.0%	5.9%	6.5%	6.6%			
T O T A L													
Heraklio	3,140,762	4,527,629	5,166,944	4,288,136	5,297,615	5,028,183	5,328,724	4,690,857	4,782,659	5,775,962	64	12	84%
Lassithi	1,319,968	1,865,199	1,863,911	1,611,294	1,979,232	1,782,522	1,812,466	1,668,544	1,646,071	1,839,531	41	-1	39
Rethymno	647,816	1,099,653	1,558,099	1,325,709	1,527,409	1,926,232	2,261,967	2,033,199	1,850,040	1,941,273	140	2	200%
Chania	395,239	599,779	1,120,983	1,094,892	1,130,688	1,356,800	1,368,761	1,856,978	1,791,131	1,939,102	184	73	391%
Crete	5,453,785	8,092,260	9,709,937	8,320,031	9,934,904	10,093,737	10,771,918	10,249,578	10,069,901	11,495,868	78	18	111%
Greece	40,354,154	47,017,186	48,887,583	42,639,811	49,973,111	49,592,246	53,435,111	51,324,196	48,312,404	53,369,507	21	9	32%
Crete/Greece	13.5%	17.2%	19.9%	19.5%	19.9%	20.4%	20.2%	20.0%	20.8%	21.5%			

Source: HNTO (1998).

An indication of the size of foreign tourist flows to the island is the number of passengers arriving by charter flights. From 1990 to 1997, the number of total arrivals by charter flights increased 47 percent. Among the two million package tourist arrivals in 1997, 83 percent were recorded at the airport of Heraklio. Although the airport of Chania achieved a four percent increase in its share of total arrivals from 1990 to 1997, still its share of total arrivals by charter flights to the island is very low (17%).

As is shown in Figure 4.2, the arrivals of tourists through charter flights, in 1991, declined due to the Gulf War. A second decline was recorded in 1995 and 1996 due to the Civil War in Yugoslavia. Both events show that Cretan tourism recovers rapidly from war in the neighbourhood countries and is resistant to political imbalances. However, after every decline in arrivals, the island has recovered quickly.

Figure 4.2: Arrivals by charter flights (1990-1997)



	1990	1991	1992	1993	1994	1995	1996	1997
Charter Flights Chania Airport	172,866	177,078	251,399	243,337	310,348	335,479	299,340	332,206
Charter Flights Heraklion Airport	1,164,886	1,131,140	1,454,138	1,468,635	1,737,321	1,553,366	1,461,863	1,638,478
Charter Flights in Crete	1,337,752	1,308,218	1,705,537	1,711,972	2,047,669	1,888,845	1,761,203	1,970,684

Source: HNTO (1998).

4.1.2 Market segmentation

Crete is considered a family resort, with approximately 42 percent of total tourist arrivals representing families with children, 38 percent couples and 20 percent singles (RITTS, 1999). It attracts mainly the younger segments of the market with

49 percent of tourists belonging to the age group 18-35, 22 percent between the age of 36-45, 18 percent 46-60, and 11 percent to the over 60 years old age group (RITTS, 1999). Due to the laissez-faire policies of the Greek government that allowed foreign tour operators to exploit the island, Crete today is dominated by package tourism. This was also encouraged by:

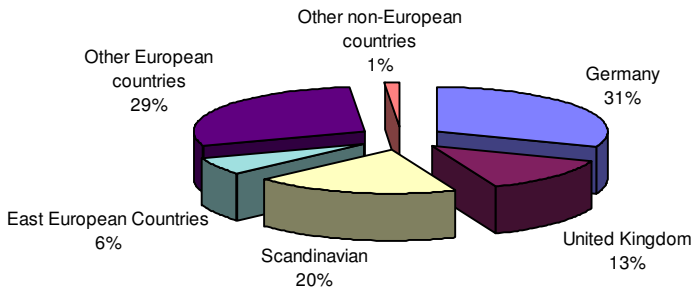
- Development Laws, e.g. Law 1262/1982 gave incentives for the construction of high numbers of low quality accommodation establishments (AEs) which attract the low-spending market segments; and
- a tourism policy based on cost leadership, e.g. frequent devaluations of the Greek Drachma (GRD), in an attempt to increase the number of arrivals through price competitiveness.

According to Horwarth (1994) in 1993, 85 percent of tourists to Crete were organised through tour operators, six percent were individual tourists and three percent conference participants. The consumption patterns of foreign tourists in Crete vary according to accommodation type, age and nationality. More specifically, expenditure by tourists staying in hotels is almost double that of tourists staying in apartments (TEI, 1998). Tourists staying in rented rooms spent even less money and tourists staying at campsites spend the least (TEI, 1998). On the other hand, older tourists spend more than younger tourists (TEI, 1998). Concerning expenditure by different nationalities, tourists from Belgium/Luxembourg together with Germans spent the highest amounts of money for the purchase of the package, followed by Russians, Finnish, Austrians and Swiss, although Russians spent the highest amounts during their stay followed by English, Finnish, Swiss, Germans and Belgians/Luxembourg (TEI, 1998). The average length of international tourists' stay is estimated to be approximately 9.5 days.

Crete has not been dominated by one nationality, although it is dominated by the European market, mainly due to the decisions taken abroad by European tour

operators (Leontidou, 1994). In 1997 the majority of tourists travelling to Crete were northern Europeans, especially Germans (32%), Scandinavians (20%) and British (13%) (Figure 4.3). Undoubtedly, East European countries offer a new potential market for the island, since they have a religious relationship with Greece, the centre of Christian Orthodoxy (Andriotis, 1995). Unfortunately, these markets, as well as others, e.g. Australians and Americans, have not been fully exploited and therefore appropriate marketing strategies are required for their attraction (Bakalis and Theodossiou, 1994; Association of Cretan Hoteliers, 1996).

Figure 4.3: Nationality classification of arrivals through charter flights in Heraklio and Chania airports (1997)



Source: HNTO (1998).

A distinction between tourists can be made according to their needs and customs when on holiday, as Wickens (1994) identified at the village of Pefkohori (northern Greece). Her work equally applies to the types of tourists visiting Crete. These types are (Wickens, 1994, pp.819-820):

1. The 'cultural Heritage' tourists attracted by natural beauty, culture and history;
2. The 'Ravers' attracted mostly by cheap prices and the cheapness of the alcohol and nightlife, as well as the sea, sun and sand;
3. The 'Shirley Valentines'. Women on a mono-gender holiday who hope for romance and sexual adventure with a 'Greek God';

4. The 'Heliolatrous' attracted by the sea and open-air activities trying to get a suntan and typical evening entertainment;
5. The 'Lord Byron' tourists that return every year to the same destination, and sometimes to the same place and the same accommodation.

4.2 TOURISM SUPPLY – EVOLUTION AND PATTERNS

Over the last two decades, the Greek government has considered Crete a top priority area for the systematic development of tourism (Kousis, 1984; 1989). To this end, various incentives have been given for relevant investment projects. (Appendix B lists the incentives given by various Development Laws). Besides, the government has undertaken the construction of the required infrastructure. Tzouvelekas and Mattas (1995) estimated that during the 1990s, a quarter of the national public and private investments were directed to Crete, and more specifically, the highest share of investments (57.8%) were lured by the tourism industry. Due to these investments the following tourism supply has been created.

4.2.1 Tourism accommodation and other enterprises

As the literature has illustrated, tourist resorts are usually created in the vicinity of international airports and sometimes ports. Since the largest international airport and port of the island are located close to the capital of Heraklio, the first resorts of the island were dispersed in close proximity to this area (Theodosakis, 1994). In particular, the first recorded AEs were constructed in the seaside areas of Prefectures of Heraklio and Lassithi. As the dependency theorists suggest for other developing islands, so in Crete the core of the island has benefited more from tourism development, compared with the peripheral areas.

However, tourist facilities found on the island during 1960s were limited. As Basil (1964) reports only a few beds for tourists were available, in 1962. Heraklio the largest city of the island had only approximately 300 hotel beds and a further 300 beds in run-down buildings without essential services. Among the currently well-

established resorts of the island, Malia had only one hotel with 40 beds, Chersonisos 44 beds in various houses, Elounta 23 beds in a one star hotel and Matala only eight beds in rented rooms. Similarly, there were no other tourist facilities, except of very poor quality.

As Harrison (1992) asserts for the modernisation of a destination in the initial stages of development the local elite becomes an agent of change. The same happened in Crete, where the local elite played a vital role in the expansion of the tourism industry. Kousis (1984) says of Drethia (a pseudonym for a rural community in Heraklio Prefecture):

> In the early 1960s, on the beach of Drethia, there was a summerhouse owned by a retired major and son of a higher status family. At that time, the first tourists made their appearance in Drethia. Since there were no facilities to accommodate them, the retired major started "hosting" them in his place. When more tourists arrived, in the next few years, he had extra rooms built as an extension of his house. This is the first tourist accommodation establishment on record in the area (pp.101-102).

Similarly in Rethymno during the 1970s, a local elite, mainly olive-oil traders, after an economic recession in the oil sector, turned their entrepreneurial activity towards hotel construction (Papadaki-Tzedaki, 1997). Undoubtedly, their choice has changed the development process of the area. Today, they own five out of the six large hotel establishments and 25 percent of hotel beds, although they own only 7.9 percent of hotel units (Papadaki-Tzedaki, 1997). Thus, the local elite had capital to invest in tourism and as a result to control many facets of the tourism development of the island, at least during the involvement stage of tourism evolution. Later, attracted by the short-term benefits, many other local entrepreneurs constructed hotels and other types of tourist enterprises.

After 1963, many of the island's resorts started to reach the development stage. The first large hotel establishment opened in 1963, the Minos Beach Hotel in Elounda, with 100 beds in bungalows. In 1965, the first Xenia was established by the Hellenic National Tourism Organisation (HNTO). Between 1968 and 1975,

many of the large hotel establishments of Crete were built and as a result during the period 1975 –1978, the number of beds in Crete more than doubled (Technical Chamber of Greece, Crete and Dodecanese Divisions, 1981).

In 1986, Crete had 736 hotel units with 50,544 beds. In 1997, the numbers had increased to 1,229 units and more than 108,000 beds. In addition to hotel beds there are thousands of beds in rented rooms. However, since rented rooms most of the time are not registered, it is a difficult task to identify their true number, although RITTS (1999) estimates that in Crete there are approximately 70.000 rented rooms, 62 percent of the total beds offered in Crete. As shown in Table 4.2, although Heraklio Prefecture has only 36 percent of hotel units, its percentage of total beds and rooms is very high (45% and 46% respectively). On the other hand, although Prefecture of Chania has 26 percent of hotel units, its share of rooms and beds is quite small (17%). Therefore, it is evident that Prefecture of Heraklio has concentrated many of the large accommodation units and Prefecture of Chania the smallest. The share of the other two Prefectures of units, rooms and beds ranges from 18 to 20 percent.

Table 4.2: Allocation of accommodation units (excluding rooms to rent and campings) per Prefecture (1997)

	Units %	Beds %	Rooms %
Chania	26	17	17
Rethymno	18	19	19
Heraklio	36	45	46
Lassithi	20	19	18

Source: HNTO (1998).

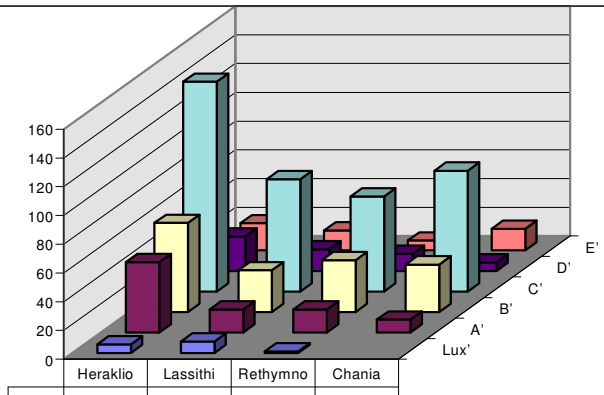
The Greek hotel classification system is different from the international 'stars' system. Generally, hotel establishments, bungalows and furnished apartments can be classified in the following categories according to their standards:

- Category LUX' ⇨ 5*
- Category A' ⇨ 4*
- Category B' and C' ⇨ 3*

- Category D' and E' ⇨ 2* and 1*
- Furnished apartments ⇨ 4*, 3*, 2* and 1*.

As Figure 4.4 illustrates, in 1997, the most Lux' category hotel units were located in Lassithi, followed by Heraklio. Rethymno had only one Lux' hotel, while the first Lux' hotel in Chania is under construction. As far as the other categories are concerned, the most units in all the Prefectures were rated category C', followed by categories B' and A'. However, the number of low category hotel establishments, which are usually small in size, may be higher since, according to Morrison (1998), a major statistical constraint of smaller hotel establishments is the limited registration with officialdom.

Figure 4.4: Category of hotel units by Prefecture



	Heraklio	Lassithi	Rethymno	Chania
Lux'	6	8	1	
A'	49	16	16	9
B'	62	29	36	33
C'	146	78	66	84
D'	24	15	12	6
E'	19	14	7	15

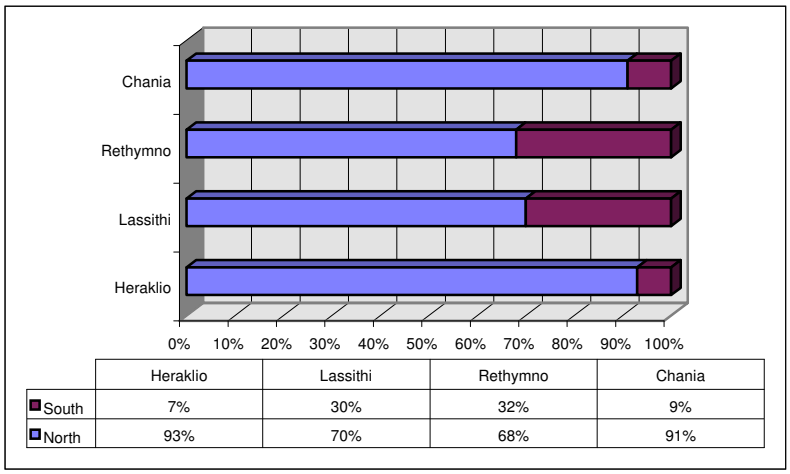
Source: HNTO (1998).

At first sight, it seems that the island targets the medium-spending markets since the majority of the hotel accommodation belongs to medium categories. However, if one considers that there are other types of accommodation, such as rooms to rent, furnished apartments and camp sites directed mostly at the end of the lower-price market, and the prices of the Lux' and A' categories hotel establishments are relatively low, compared to their European counterparts, it can be assumed that the market attracted to the island belongs mostly to the low-spending segments.

Additionally, although the number of arrivals and guest-nights increases almost every year, the occupancy rates of the hotels are not satisfactory, due to a parallel increase in new beds. As a result, hotel occupancy rates have dropped from 83 percent in 1994 to 73 percent in 1997, resulting in low profitability of the hotel sector. For example, only one third of Cretan hotel enterprises achieved a profit in 1996 (ICAP, 1997).

There is an over-concentration of units on the northern coast of the island. In 1993, over 90 percent of units in the Prefectures of Heraklio and Chania and around 70 percent in the Prefectures of Lassithi and Rethymno were located on the northern coast (Figure 4.5). Additionally, in 1993, the Prefecture of Heraklio had the highest share of rooms to rent, camp sites, car and bike rentals, and travel agencies, while the Prefecture of Rethymno had on average the lowest (Table 4.3).

Figure 4.5: Land-planning allocation of hotel units in Crete (1993)



Source: Compiled by OANAK (1995).

Table 4.3: Allocation of tourist enterprises by Prefecture (1993)

	Room to Rent %	Camp sites %	Rent a Bike %	Rent a Car %	Travel agencies %
Chania	27	28	16	19	25
Heraklio	28	33	41	53	48
Rethymno	23	17	17	9	11
Lassithi	22	22	26	19	16

Source: OANAK (1995).

The construction of hotel establishments was encouraged through incentives, e.g. interest free subsidies, untaxable allowances and extra depreciation from various Development Laws. In total, the Cretan hotel industry attracted during the period 1982-1995, 20 percent of national investment subsidised through Development Laws (Table 4.4). The capital available was approximately 56 billion GRD, 22 percent of total investments, attributed to Development Laws nation-wide, creating 23 percent of beds and 24 percent of jobs. Regarding investments within different Prefectures, the Prefecture of Heraklio invested in larger hotel units, since although the number of new hotels was lower than Prefectures of Rethymno and Chania, the level of total investment was much higher.

Table 4.4: Subsidies through development laws to hotels from 1-1-1982 to 13-10-1995 (million GRD)[1]

	No of Investments	Level of Investments	Level of Subsidy	Special Subsidies	Private Capital	No of Jobs Created	Investments / job[1]	No of Beds	Investments / bed[1]
Rethymno	132	14,881	3,937	564	9,284	1,539	9.66	8,550	1.74
	30%	27%	27%	29%	27%	26%		28%	
Chania	151	13,664	3,985	516	8,767	1,208	11.31	7,637	1.79
	35%	24%	27%	26%	26%	21%		25%	
Lassithi	57	9,198	2,695	268	5,126	890	10.33	4,940	1.86
	13%	16%	18%	14%	15%	15%		16%	
Heraklio	95	18,196	4,185	617	10,539	2,164	8.40	9,372	1.94
	22%	32%	28%	31%	31%	37%		31%	
Crete	435	55,939	14,802	1,966	33,715	5,801	9.64	30,499	1.83
Crete/Greece	20%	22%	17%	20%	26%	24%		23%	
Greece	2,180	256,078	86,960	9,669	128,706	30,449	8.41	131,361	1.95
	100%	100%	100%	100%	100%	100%		100%	

Source: Compiled by Hotel Chamber of Greece (1996).

4.2.2 Transportation – Accessibility – Infrastructure

Air transport plays an important role in the transportation of tourists to the island, since more than 90 percent of foreign tourists arrive by charter flight. Crete has two international airports operating in Heraklio and Chania, and a smaller one in Sitia for domestic flights. In an attempt to direct tourists to more regions of the island (other than the existing coastal strip of the north), the opening of the first private airport is under construction in Ierapetra, south-eastern Crete, and work is being carried out at the airport of Sitia in order to allow charter flights.

[1] The exchange rates of GRD with US$ and British pound are shown in Appendix C.

Direct schedule flights to the island from abroad are limited, although from May to November there are charter flights from many European countries. It is estimated that during the summer months, air traffic is so high that Heraklio airport has approximately 120 plane arrivals per day (Interkriti, 1997). In the internal flights market apart from Olympic Airways, liberalisation has resulted in flights by several domestic private carriers (Jourmard and Mylonas, 1999).

Recently much work has taken place to improve facilities and services at airports. The airport of Chania, after the completion of an improvement and expansion project, is a well-run airport that can handle an increasing number of flights. As far as Heraklio Airport is concerned, despite completion of a major project for expansion and a face-lift of the surrounding area, its present provision is not appropriate for the needs of the large number of tourists during the summer[2]. Therefore, research is being undertaken into a project that would involve the lengthening of the runway.

After air transport, shipping plays an important role in the transportation of tourists to the island, mostly domestic. Crete has six ports in Heraklio, Chania, Souda, Rethymno, Agios Nikolaos and Sitia. There are sea connections with mainland Greece, quite a few of the Greek islands and Mediterranean countries. Although there are many problems regarding services provision, operation and appearance of the ports, projects are under way for their solution, e.g. enlargement and construction of two docks in Heraklio harbour and improvement of the foundation of Souda harbour.

The island's road network is neglected, a fact that has sometimes made travelling difficult. Therefore, work has begun to improve the main road axes, e.g. construction of bridges in the areas of Gournes, Chersonisos, and Malia and the resurfacing of roads in Rethymno (Region of Crete, 1995a; Nikolakakis, 1998a).

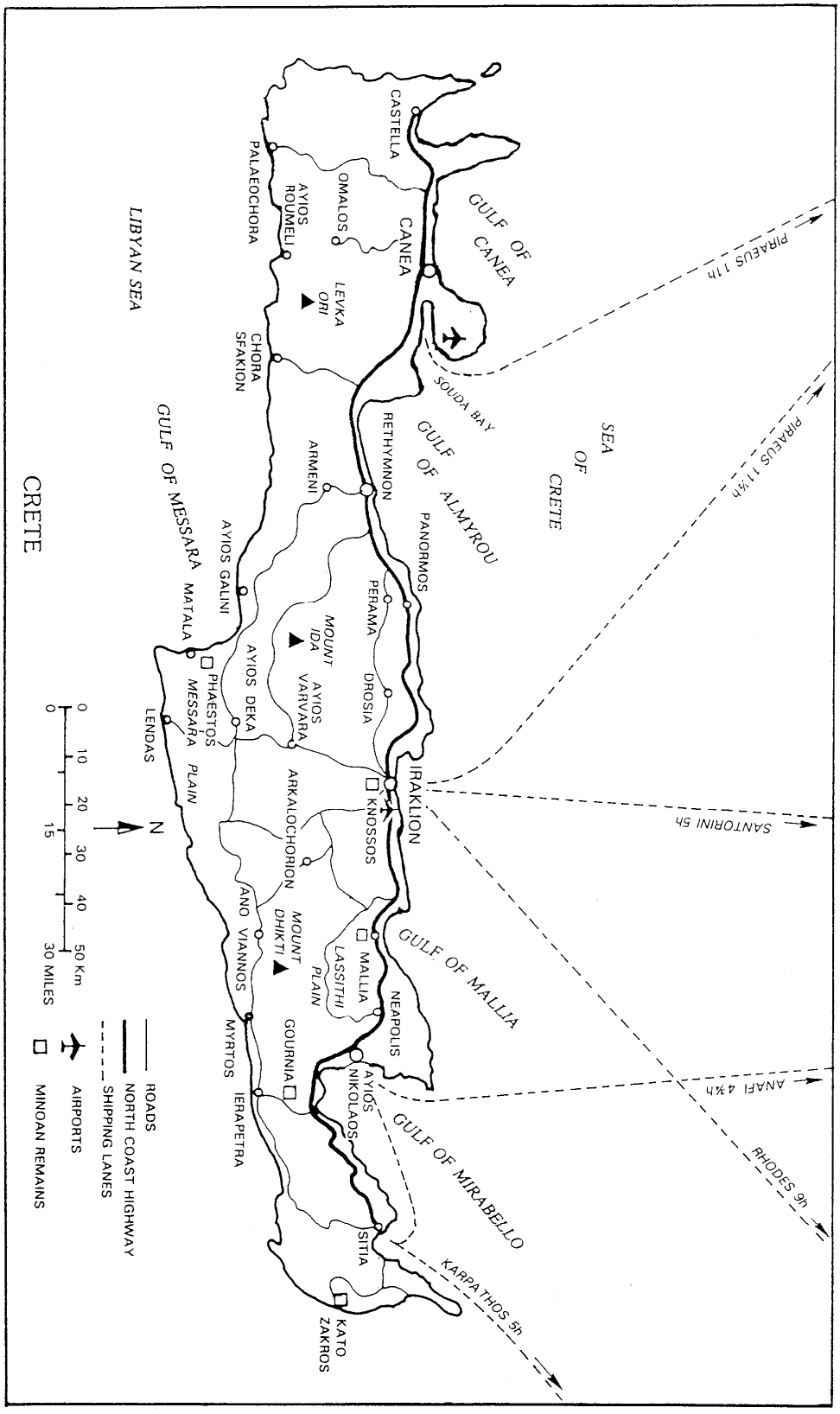
[2] Heraklio Airport is the second airport of the country, relative to the number of passengers (RITTS, 1999).

These works focus on the northern national highway and have an estimated cost of 20 billion GRD. The southern part of the island lags behind development because of access difficulties, mainly due to the bad road network connections and the mountains (see map 4.1). An exception is the Prefecture of Lassithi where road construction is under way.

Telecommunications are problematic in many tourist areas during the summer peak season. In addition, areas of the island have severe electric power shortages and insufficient quantities of water. As a result, the local population and entrepreneurs sometimes have to buy water from water-wagons. As Clark et al. (1995) highlight if the number of tourists continues to increase in the urban zone of Chania, additional water will need to be imported to meet the increasing demand, making water supply more expensive for consumers. On the other hand, there are places without any biological system to purify the liquid sewage that is thrown into the sea without treatment. Fortunately, projects for the construction of various dams and water barriers, the use of softer forms of energy, the provision of better water supply, sewage system and biological treatment plants have been undertaken through EC funding (Region of Crete, 1995a). For instance, the EC (1999b) estimated that by the summer of 1999 no more untreated sewage will be discharged into the sea along the heavily populated coastal strip of northern Crete. The results are encouraging since the number of "blue flags" awarded to the island has more than tripled from 1991 to 1998 (WWF, 1998).

Moreover, there are facilities for special interest holidays including diving, cycling, horse riding and golf. The first golf course in Crete, functioning 12 months a year is in the area of Elounda, and there are plans by local authorities for the construction of five more courses in an attempt to differentiate the tourist product, attract higher income tourists and expand the tourist season. However, the island has no casino due to delays from the Greek State to grant leave for the construction of one.

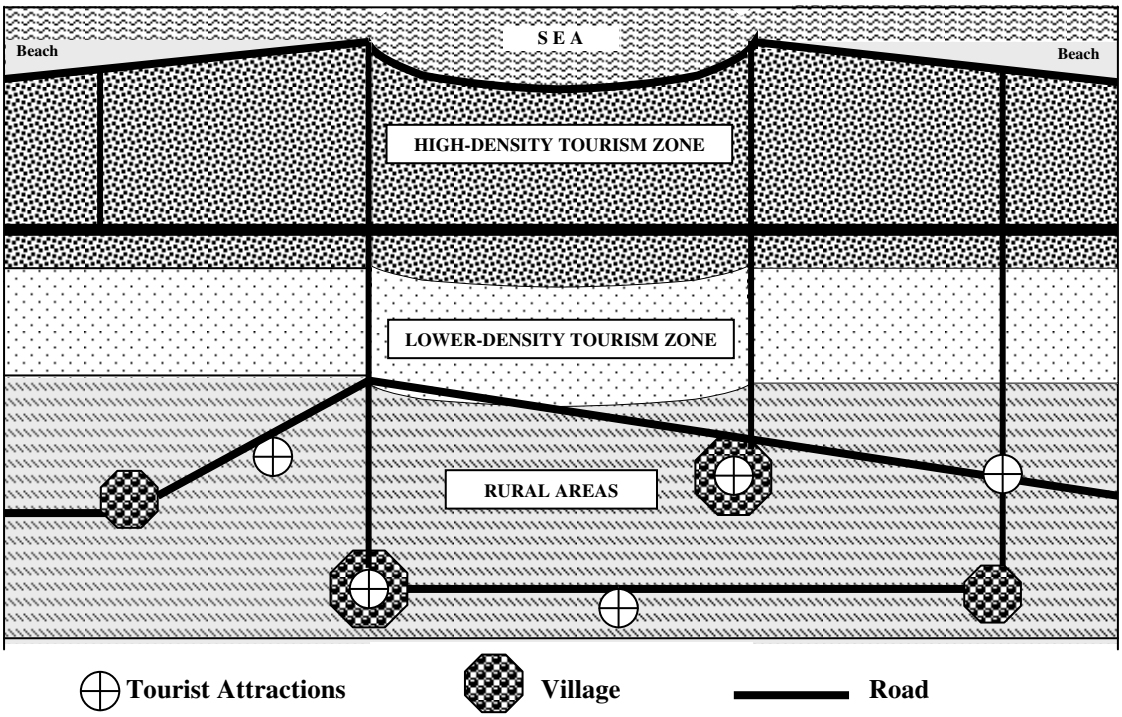
Map 4.1: Crete


CRETE
GULF OF CANEA
CANEA
CASTELLA
OMALOS
LEVKA ORI
AYIOS ROUMELI
PALAEOCHORA
CHORA SFAKION
LIBYAN SEA
GULF OF MESSARA
MATALA
PHAESTOS
MESSARA PLAIN
LENDAS
AYIOS GALINI
AYIOS DEKA
ARMENI
RETHYMNON
GULF OF ALMYROU
PANORMOS
PERAMA
DROSIA
MOUNT IDA
AYIOS VARVARA
ARKALOCHORION
IRAKLION
KNOSSOS
MALLIA
LASSITHI PLAIN
MOUNT DHIKTI
ANO VIANNOS
MYRTOS
IERAPETRA
GOURNIA
AYIOS NIKOLAOS
SITIA
KATO ZAKROS
NEAPOLIS
GULF OF MALLIA
GULF OF MIRABELLO
SOUDA BAY
SEA OF CRETE
PIRAEUS 11h
PIRAEUS 11½h
SANTORINI 5h
ANAFI 4½h
RHODES 9h
KARPATHOS 5h
N
0 10 20 30 40 50 Km
0 15 30 MILES
ROADS
NORTH COAST HIGHWAY
SHIPPING LANES
AIRPORTS
MINOAN REMAINS

4.2.3 Coastal resorts morphological transformation

Because of the increase in tourism activity, especially on the northern coast, there has been a tremendous transformation of coastal areas. The high concentration of buildings has transformed many seaside villages into urban space, as models in Chapter Two illustrated for other tourist resorts (e.g. Young, 1983; Meyer-Arendt, 1990; Smith 1992a; Weaver, 1993). Undoubtedly, fishing villages, such as Chersonisos, Malia and Agios Nikolaos, have lost their authenticity and architecture due to the easy and quick profit from mass tourism development (AHTE, 1995). In Crete, as in all coastal resorts, the nucleus of development is the beachfront (or sometimes a small fishing port). This is then surrounded by various zones which is the 'outer area of influence' and contain facilities and services which support tourism (Dredge, 1999). Through observation of various resorts of the northern coast of the island, the following zones of tourism activity can be identified (Figure 4.6):

Figure 4.6: Morphological zones of unplanned Cretan coastal resorts



Source: Author

***High-density Tourism Activity Zone*.** This zone is separated from the beach by a road or a promenade, where for the convenience of tourists, limited vehicular access is allowed. Many cafes and restaurants, hand in hand with Cretan art, leather goods and goldsmith's shops create a Recreational Business District (RBD). In the RBD small AEs are located, and some others are found on back streets. The RBD becomes extended in both directions from its initial core where larger hotels and second homes exist. As a result, a virtual non-stop ribbon development of hotels and other types of tourist enterprises stretch along the coast. Apart from the promenade, there is a main street where restaurants, bars, souvenir shops, and services are located and it is the major street for access to the resort and transfer to and from the airport and the urban centres of the island. In many resorts on the island, the RBD is also on this street, since the traditional promenade is absent and the beachfront is occupied by accommodation establishments and bar/restaurants, often build as close as possible to the sea.

Beyond the High-density Zone is the ***Lower-density Tourism Activity Zone*.** Residences for locals and imported workforce occupy the major part of this zone, as well as small AEs, mostly rooms to rent. In addition, other types of modest enterprises catering to the budget market and the locals can be found. Roads are very narrow, pavements almost non-existing, and parking spaces scarce making everyday life difficult for locals.

The final zone is the ***Rural Zone*.** Although the high and low-density zones provide the focus of arrivals and tourism activity, other rural places are also visited, usually on day trips. A network of arterial roads connects the resort with other resorts, natural tourist attractions, archaeological sightseeing and villages that often attract tourists on day trips. Nevertheless, the economy of rural areas is mainly directed to farming and small industry, although tourism (with limited exceptions) is a secondary activity.

Since the above zones have formed without any planning there is a lack of green areas and a subsequent mix of land which has meant that it is possible to put a loud disco next door to a residential area, or an electric power station next to a hotel. Although the above zones are evident in seaside resorts of the island of Crete, they are also found in other Mediterranean resorts, for example on the Spanish island of Ibiza.

4.3 OUTCOMES OF TOURISM DEVELOPMENT

4.3.1 Economic outcomes

Before the introduction of tourism, the Cretan economy was directed towards agriculture like most of the Greek regions (Kousis, 1984; Tsartas, 1992). Today, tourism, together with agriculture are the island's largest earners of foreign exchange. Thus, in line with the diffusion paradigm, there was a movement from the 'traditional' agricultural sector into the modern – tourism oriented sector. Nevertheless, in contrast with other island regions in Greece, where there is a monoculture towards tourism, Crete has a healthy balance between growth in agriculture and tourism, even if investment is currently geared more towards tourism (Eurostat, 1994). However, regional imbalances have been accentuated with the northern part of the island, mainly developing intense urban and tourist activities, and the southern and central part directed towards agriculture, with tourism supporting only a small part of the economy.

In 1997, around 2.5 million tourists visited the island, creating incomes of approximately 500 billion GRD (Xrima & Tourismos, 1998). On average each tourist spent 365,349 GRD (TEI, 1998). It is estimated that 42 percent of this expenditure was paid to foreign tour operators for the purchase of the tourist package (transport and accommodation). Of the remaining 58 percent, 24 percent was spent on shopping, 17 percent on catering, 12 percent on local transportation and five percent on services (TEI, 1998). However, it is noteworthy that as Leontidou (1998) remarks evaluation of economic impacts of tourism in Greece is

complicated by the lack of specific studies. Official data underestimates foreign exchange receipts, as they include only foreign exchange transactions recorded by the Bank of Greece, and as a result they are much lower than actual tourism consumption, which very often is unofficial (Singh, 1984; Leontidou, 1998).

Due to the significance of tourism for the island's economy, during recent decades all Greek governments have used tourism to correct the economy's problems namely controlling the large budget deficit and the public sector's borrowing requirements, and to improve the decaying infrastructure. Incomes from the tourist industry together with EU aid for the financing of major projects have allowed the country to balance its foreign payments. However, the significance of tourism for the island cannot be proven from tourism's contribution to the balance of payments, since Crete as an insular region of Greece, has no independent balance of payments accounts and its foreign trade is aggregated with that of the other 12 Greek regions to form the composite of Greek balance of payments. Therefore, the term balance of payments cannot be directly applied to the island. In addition, much tourist information is included statistically within services and cannot be isolated. As Table 4.5 shows, the share of the tertiary sector increased by nine percent between 1981-1991, mainly due to increased tourist arrivals, since tourism is a part of the tertiary sector. For the same period in Greece, the increase of GNP in the tertiary sector was only four percent. However, any reference to the census must be taken cautiously due to the length of time elapsed between 1991 and the research period.

Table 4.5: GNP per sector (Census 1981, 1991)

	1981		1991		81/91 change
C H A N I A					
Primary	1,109	27%	1,319	24%	-3%
Secondary	881	21%	915	17%	-4%
Tertiary	2,123	52%	3,248	59%	7%
Total	4,113	100%	5,482	100%	
R E T H Y M N O					
Primary	604	30%	672	23%	-7%
Secondary	438	22%	524	18%	-4%
Tertiary	987	49%	1,662	58%	9%
Total	2,029	100%	2,858	100%	
H E R A K L I O					
Primary	2,144	25%	2,411	20%	-5%
Secondary	2,000	23%	2,329	20%	-3%
Tertiary	4,364	51%	6,999	60%	9%
Total	8,508	100%	11,739	100%	
L A S S I T H I					
Primary	988	34%	1,011	29%	-5%
Secondary	502	18%	566	16%	-2%
Tertiary	1,370	48%	1,954	55%	7%
Total	2,860	100%	3,531	100%	
C R E T E					
Primary	4,845	28%	5,413	23%	-5%
Secondary	3,821	22%	4,334	18%	-4%
Tertiary	8,844	50%	13,863	59%	9%
Total	17,510	100%	23,610	100%	
G R E E C E					
Primary	59,516	15%	62,786	13%	-2%
Secondary	133,214	33%	147,380	30%	-3%
Tertiary	214,307	53%	283,838	57%	4%
Total	407,037	100%	494,004	100%	

Source: Athanasiou et al. (1995).

In 1995, public sector income from tourism activity in Crete was approximately 65.5 billion GRD (Lagos, 1996). Although the public sector, through taxation provides better services and infrastructure, there are cases where taxes have had an adverse effect on the island's tourism industry. For example, an arrival tax on passengers for the financing of a new airport in Spata, Athens, provoked "an immediate outcry and a threatened boycott by tour operators" (EIU, 1994, pp.142-143).

Unemployment in Crete in 1991 was at 5.5 percent, 3.1 percent higher than 1981 (Table 4.6). Table 4.7 presents a declining proportion of employment in the primary sector, although employment in the tertiary sector, including tourism, increased from 32 percent in 1981, to 50 percent in 1991. Therefore, tourism in

Crete has been seen as the panacea for employment creation and was used by the Greek government as a strategy to reduce unemployment rates. As a result, in 1991 because of employment opportunities in the island's tourism industry, the unemployment rate was 2.6 percent lower than the national total. However, unemployment rates were higher in the Prefectures of Chania and Heraklio where the major urban centres of the island are located. In 1997, it is estimated that the percentage of unemployment in Crete had fallen to 4.8 percent, although in Greece it had increased to 10.3 percent (NSSG, 1999). In the future, Glytsos (1999) estimates that unemployment rates will increase in Greece, with the exception of Crete, due to its flourishing tourism industry and the efficient agriculture. Therefore, if no movement of workers into Crete takes place, labour shortages will result.

Table 4.6: Total workforce and percentage of unemployment (Censuses 1981, 1991)

	1981		1991		81/91 change
	Workforce	% of unemployed	Workforce	% of unemployed	
Chania	45,642	2.8	50,834	7.1	4.3
Rethymno	27,951	2.1	27,378	4.9	2.8
Heraklio	90,851	2.2	103,577	6.8	4.6
Lassithi	28,730	2.6	29,396	4.1	1.5
Crete	193,174	2,4	211,185	5,5	3.1
Greece	3,543,797	4,4	3,886,157	8,1	3.7

Source: Athanasiou et al. (1995).

Table 4.7: Employment by sector (Censuses 1981, 1991)

	1981	%	1991	%	81/91 change
Crete					
Primary	95,856	51	64,563	32	-19
Secondary	33,119	18	35,099	18	-
Tertiary	59,585	32	99,813	50	18
Total	188,560	100	199,475	100	
Greece					
Primary	988,737	29	698,738	20	-9
Secondary	1,032,258	31	907,474	25	-6
Tertiary	1,367,522	40	1,965,745	55	15
Total	3,388,518	100	3,571,957	100	

Source: Athanasiou et al. (1995).

Direct employment in the Cretan tourism industry increased from five percent in 1981 to 8.1 percent in 1991 (Athanasiou et al., 1995). However, Leontidou (1998)

identifies a major difficulty to the construction of an accurate indicator of direct employment in tourism, namely that all tourism sectors, except hotels, serve local residents as well as visitors. However, since there are no data regarding the number of undeclared employees and the people that have indirect employment in tourism, the real contribution of tourism to employment creation cannot be stated, although the Region of Crete (1995a) estimated that approximately 40 percent of the island's population is directly or indirectly involved in the tourism industry.

The number of hotel employees in 1993 was 14,123 (Theodosakis, 1994). This number covers only the employees declared to the Insurance Agency of Hotel Employees (TAXY), in August of the same year. As a result, it does not include non-registered family members, ex-patriate employees without any work permit and employees in undeclared AEs. If all these were included, the number would be much higher. For example, Papadaki-Tzedaki (1997) found that in Rethymno 73 percent of hotel establishments surveyed had one or more undeclared family members working full or part time but receiving no payment.

Among hotel employees, half were working in Prefecture of Heraklio, although the proportion working in Prefecture of Chania was the lowest (10%) (Theodosakis, 1994). Since the share of hotel beds in Prefecture of Chania was approximately 17 percent, it is evident that this Prefecture has smaller properties with a small ratio of employees per bed. In particular, the ratio of employees to beds in the large hotels of Rethymno is from 1:3 to 1:4.5, although the ratio for smaller hotels is from 1:8 to 1:20 (Papadaki-Tzedaki, 1997). In addition to hotel employment, tourism created vacancies in a number of other businesses, namely restaurants, folk art and jewellery shops, among others (Andriotis, 1995).

Employment in the Cretan tourism industry is highly seasonal. However, most of the tourism workforce in Crete would be unable to find a job in any other economic sector and thus seasonal employment is better than unemployment (Mourdoukoutas, 1985). In practice, employment in the tourism industry is

challenging. Mourdoukoutas (1988) asserts that in Greece the average hourly wage in tourism is 6.4 percent higher than in non-seasonal occupations. In addition, the income of seasonal tourism employees during the off-season is supplemented with unemployment compensation from the state. Therefore, one third of seasonal tourism employees do not want to work during the off-peak season even if they had the opportunity to have the same job at the same wage for that season (Mourdoukoutas, 1985).

In Crete, many tourism employees have a second job mainly in agriculture, as Papadaki-Tzedaki (1997) found in Rethymno. In autumn and winter, the reduction in tourist arrivals is compensated for by the harvest and processing of the main crops of the island - olives (Papaioannou, 1987; Mourdoukoutas, 1988). In spring maintenance and repair of tourist properties absorbs a large number of the unemployed. As a result, there is a seasonal balance in incomes, as well as a kind of multiple employment between tourism and agriculture.

Massive tourism development on the island has attracted migrants/immigrants and expatriate labour (Papadaki-Tzedaki, 1997). Lazaridis and Wickens (1999) identify two major types of migrant workers in the Greek tourism industry, "consisting of a replacement labour force, filling the undesirable, low paid menial jobs in the primary and tertiary sectors, which have recently been deserted by Greeks" (p.634), including the Albanians, who enter the country illegally because of poverty and high unemployment in their country, and the Western tourist-workers, who as EU citizens, enter the country legally during the summer season attracted by the good life and the climate (Lazaridis and Wickens, 1999).

As AHTE (1995) remarks in Chersonisos (a mass developed resort), the local population is approximately 4,000. However, the incoming workforce is estimated at approximately 10,000. Although most of this workforce is Cretan, coming from other parts of the island, there is a high share of non-Cretan workforce, many in managerial positions. In Rethymno, Papadaki-Tzedaki (1997) indicates that

although 78 percent of hotel employees originate from the Prefecture of Rethymno, as far as management is concerned, only 42 percent come from Rethymno. Herzfeld (1991) highlights that in Rethymno, no entrepreneurs operate during the winter, since the vast majority return to their hometowns. Mourdoukoutas (1988) estimates that in Crete 77 percent of total employees in tourist establishments are all-year residents, and the remaining 23 percent come from other regions of Greece just for the summer tourist season.

Because of tourism expansion, land prices have increased making the life of some locals harder (Greger, 1985). In 1993, the value of one stremma[3] in Rethymno was equal to the value of 120 stremma during the early 1970s (Papadaki-Tzedaki, 1997). Thus, no entrepreneurs from Rethymno have bought the expensive shorefront shops in Rethymno (Herzfeld, 1991). Similarly, Kousis (1989) asserts that in Drethia, between 1965 and 1972, outsiders purchased a large part of the coastal land. "The vendors, local families were usually obliged to give up their fields, either through expropriation laws or because of their impoverished status" (Kousis, 1989, p.322). Since the sale, construction of large hotels started and locals started to sell their labour for construction and tourism related jobs.

4.3.2 Social outcomes

The concentration of the tourism industry in the north coast of the island has created serious problems to the social life of many communities. The problems from mass tourism were evident even during the first years of tourism evolution as one of the early development plans, the Glikson Report (1965, cited in Komilis, 1987) states:

> The arrival and stay of tourists with low income and social or moral values creates problems. There are tourists, in order to secure money for living, commit various statutory criminal offences, such as mugging, larceny, pushing drugs etc. (p.306).

[3] 40 stremma = 1,000 m^2 = 0.24 acres = 0.1 hectare.

Through contact with tourists, social problems have been created and the social values and habits of the local community and especially young people have changed. According to the Glikson Report (Komilis, 1987):

> The behaviour of foreign tourists, based on social and moral prototypes totally different from those prototypes of the host local community, had an unfavourable impact on the behaviour of the average local citizen. Specifically, there are cases whereupon a young man residing in the village, whose daily employment is to look after the sheep, deserts his family in order to seek employment in the city as a waiter, a dancer in night clubs, a male escort etc. (p.307).

The differences in residents' perceptions and customs between tourist-dependent communities and communities not dependent on tourism are evident. For example, Tsartas et al. (1995) compared tourist developed areas in Lassithi with a non-tourist area (Tzermiado) and found that residents of tourist areas were more understanding about the negative impacts of tourism in society, e.g. nudism, AIDS and drug consumption, and tended to disregard their own customs, e.g. they attend the church services less frequently, compared to residents of the non-tourist developed area.

Kousis (1989) reported that in Drethia, since the rapid growth of tourism, young women and men have more sexual freedom. The relationships between local men and female tourists have revised local moral codes, applied only to male Cretans, who were systematically dating foreign women, instead of local women who were not allowed to date (Kousis, 1989; Stott, 1996). As a consequence of the liberated behaviour of many foreign female tourists coming to the island on holiday, men become promiscuous (in Greek, known as sexual fishing; kamaki) (Castelberg-Koulma, 1991; Zinovieff, 1991; Wickens, 1997). However, there are cases where men 'marry their victims' (Leontidou, 1994). Many Cretans have married people from European countries and, as Kousis (1989) states, all European women in Drethia married to locals were once tourists. When AIDS was commonly acknowledged, foreign female tourists marched in Cretan resorts in protest against

the sexual attitude of local males. Thus, almost half of the women in Lassithi blame female tourists for most quarrels between married local couples that often lead to divorces (Tsartas et al., 1995).

Through tourism, many young women have received more widespread control of decision-making within families and became autonomous as wage earners or business owners. In Anoya, a Cretan mountain village, tourism was seen as a new economic activity that entered village life and many women with manual looms opened small shops, where they could sell their products to tourists (Saulnier, 1980). Since the number of tourists was not sufficient for the sales of increasing production, outside merchants bought the products and resold them to the tourist centres. Nevertheless, women are employed in lower status jobs, since, although in 1996, 64 percent of all hotel employees in Rethymno were women, only 20 percent held managerial positions (Papadaki-Tzedaki, 1997).

Tourism evolution resulted in the abandonment of traditional agricultural and craft-related occupations because tourism-related jobs were perceived as generating higher income and more attractive (Haralambopoulos and Pizam, 1996). Professions, such as cobbler, tailor, dairyman and traditional coffee-house keeper have been replaced by modern ones. Likewise, Kousis (1989) found in Drethia, that with the arrival of tourists, "the number of farmers decreased dramatically, while those for small shopkeepers and wage earners increased considerably" (p.332).

Once contact with tourists has developed, the local population demands different kinds of foreign product, previously consumed only by tourists. In particular, per capita consumption of local wine and raki (the local spirit) has diminished and foreign/imported drinks, such as beer, whisky, and vodka have replaced them (Wickens, 1994; Moore, 1995). However, Papadopoulos (1988) argues that other agencies apart from tourism contribute to demonstration effects in Greece, such as

the media, television and newspapers, as well as emigrants and the thousands of Greek students studying abroad.

As a result of mass tourism development, Cretan hospitality and local patterns of interaction have reduced, and relationships with tourists are a kind of commodity. Tourist enterprises often tout for customers giving the impression that local residents are servants of tourists. As Herzfeld (1991) asserts, since tourism is an easy and fast source of money, there are cases where Cretan shopkeepers do not spend their time and money to treat their customers in the way they used to.

Nevertheless, residents of Lassithi do not see tourists as the cause of problems and are not annoyed when they encounter them during the summer on the beach or on public transport (Tsartas et al., 1995). Similarly, residents of Magoulas, a Cretan mountain village, like to offer their hospitality and enter into dialogue with foreigners since the encounter with them brings new ideas into their lives (Greger, 1985). As a result, a survey by AHTE (1995) indicates that 90 percent of foreign tourists found local residents to be friendly and helpful.

Tourist spending on crafts, souvenirs and the like contribute to the preservation and, sometimes, the revitalisation of traditional arts and crafts, as well as folklore, local fairs and festivals on the island. From studies undertaken in Rethymno it is evident that although the image of the area is one of a package destination, tourists are interested in the culture and buy textile items (Archodakis and Tzanakaki, 1997; Atlas, 1997). In effect, the local municipality and the local tourism industry support initiatives for the promotion of cultural activities, e.g. through courses in textile promotion. Other folk-art crafts, made by Cretans and sold in the local shops of the island, include basket-weaving, wood sculpture, knifemaking, ceramics and leather. Although it is claimed that because of tourism expansion, host communities lose their authenticity and their customs, the Cretans have kept many of their local habits and tradition, they still sing traditional songs, play traditional music instruments and dance local dances (Areia, 1996).

Of the 600,000 island inhabitants (Eurostat, 1999), equivalent to 5.3 percent of the national total, it is estimated that 70 percent are concentrated in the northern part of the island. Thus, the southern coast where tourism is under-developed witnesses serious depopulation, because of the migration of a large proportion of their economically active population to the urban centres of the island (mainly Heraklio) and to fast growing resorts during the summer season. For example, Tsartas et al. (1995) remark that the population of Tzermiado, in Lassithi, has decreased 20 percent since the 1980s due to the out-migration of young people to the tourist areas. Despite this, Rudman and Mortzou (1993) claim that life exists in the islands hills and mountains "providing a back-drop to village life and the agricultural industry" (p.31).

4.3.3 Environmental outcomes

Crete has remarkable natural resources. Its coastline totals 1,300 km (7% of the country's coastline), 15 percent of which consists of sandy beaches. Approximately 48 percent of Cretan land is mountainous, plains cover 23 percent of the land, and the remainder is semi-mountainous. Crete has 1,624 native plant species of which around 8.6 percent are endemic and the fauna amount up to 1,000 species (Anagnostopoulou et al., 1996). The recorded caves on the island number 3,500 and there are 100 gorges (Anagnostopoulou et al., 1997; Tourism Agency of Crete, 1997). Since the manipulation of environmental resources by the tourism industry and the public sector does not always follow orthodox routes (Nikolakakis, 1998b) there is a danger of environmental degradation. The concentration of package tourists to the northern part of the island, the lack of land use planning, the uncontrolled building construction, the lack of waste and garbage management and the insufficient infrastructure (e.g. transportation and parking spaces) have all resulted in serious environmental problems. The increasing population together with increased tourism activity have become a point of concern due to continuing resource scarcity, e.g. water and electricity.

Some luxurious hotels in Elounda and Agios Nikolaos, perhaps the most luxurious in Greece, are located beside rented rooms and small hotels of poor architecture (Tsartas et al., 1995). As a result, the uncontrolled and unplanned development in some areas devalues the Cretan tourism image and natural resources, and dilutes the quality of tourist attractions. More specifically, Hopkins (1977) reveals:

> From a conservationist viewpoint there have been many obvious mistakes. Hotel siting has been uncontrolled and careless, with many landscapes focused to accommodate quite unsuitable buildings (p.235).

Although, villages along the coastal tourist strip have received a financial boom because of tourism evolution, their human and physical ecology is under considerable threat (Greger, 1988). Greece has almost no zoning system and land registry system. Therefore, for many years, one could build any type of accommodation as long as modest building restrictions were met (Peterson and McCarthy, 1990a). Unfortunately, it is proven that once an "unauthorised-literally, arbitrary" construction has been erected, no one will tear it down (Herzfeld, 1991). As a result, there is a highly visible physical transformation of the island as the building of more and more tourist enterprises dot the landscape.

Many beaches are private, and the linear development of large AEs along the coast has reduced beach accessibility for many customary users (Leontidou, 1998). Besides, fires have destroyed large areas of forests or forest-like areas; many located in coastal areas. Very often these areas, due to lack of control, are converted into pastureland and eventually become built and urbanised (YPEXODE, 1998). The degradation or loss of such resources is certain to affect tourism itself. On the other hand, according to EIU (1990):

> Disposing of the huge amount of refuse and sewage generated by each summer's tourists is already a major problem for many Greek municipalities. Many of the countries' beaches have become littered with indestructible refuse left by both tourists and Greeks (p.61-62).

Additionally, unrestricted human activity in the Mediterranean basin, and the concentration of many tourist installations and operations directed to the package tourists, have contaminated the sea.

The Cretan local community is aware of environmental problems and expresses its indignation. In particular, Kousis (1999) examined local incidents of social demonstration in the Prefecture of Heraklio, and found that 54 out of 369 cases were directly related to tourism activity. They mainly involved problems, such as noise pollution, hotel waste and ecosystem disturbances. Various non-governmental organisations (e.g. WWF) are opposed to further tourism development in order to safeguard some of the island's underdeveloped resources.

In recent years, many projects have been launched for the preservation of environmental resources. In particular, three areas of the island have been included in Natura 2000, for the protection of the loggerhead turtle (*caretta caretta*). Moreover, two out of the four selected LIFE projects in Greece, for 1998, were implemented in Crete. The first project had as a target the reinforcement and re-establishment of measures for the bird species lammergeier (*gypaetus barbatus*), and the second the restoration and extension of the only natural palm forest in Europe, Vai, which in the 1950s was covering 300 ha, and today only 12 ha remain (EC, 1998a).

Furthermore, an increasing number of tourist enterprises use environmental standards and practices in an attempt to attract an environmentally-aware clientele and increase profit in the long-term. For example, Grecotel was the first Mediterranean hotel group which, in 1992, formed an environmental department (Bouyouris, 1998). Environmentally-friendly initiatives adopted by the hotel chain include preservation of turtle-breeding, saving water and energy, reduction of refuse, pollution control, using suppliers which provide eco-friendly and organic products, and public awareness programmes to reduce beach litter and sea pollution (Field, 1997; Bouyouris, 1998; Middleton and Hawkins, 1998). Other

hotels on the island have recognised the role of the environment for future generations and have adopted sound environmental "green" practices, such as the biological treatment of wastewater, and Reduce/Reuse/Recycle practices (Hellenic Travelling, 1996; Diamantis, 2000).

Tourism in Crete can be a stimulus for the preservation of the island's national pride. Because of the location of Crete at the crossroads of sea-routes for the eastern Mediterranean, it carries a long history that dates back to the 7th millennium BC (Tzamoutzakis, 1994). It has many historical monuments of perfect architecture from all periods, from the Minoan civilisation (2600 BC-1150 BC) to the religious Byzantium. The island's architecture has been influenced by a constant change in conquerors, such as Arabs, Venetians and Turkish, together with local architectural tradition (Areia, 1996). It has approximately 25 archaeological sites, 20 museums, 25 Byzantine monasteries, 860 Byzantine churches, Turkish mosques and Venetian public buildings and castles.

By utilising the funds generated from admission fees, many endangered local arts and natural and cultural heritage can be better preserved. It is generally agreed that the preservation of the environment and the monumental architecture in Crete attract tourists and therefore help to reinforce the island's economy. In 1993, approximately two million people visited the main archaeological Minoan sites of Knossos, Festos, and Agia Triada and the museum of Heraklio, creating an income of 1,160 million GRD (Region of Crete, 1995a). In 1993, the Greek government spent approximately 180 billion GRD on culture, over 75 percent of which was spent on archaeological heritage (Kalogeropoulou, 1996). Because of tourism, the island has received higher bounties compared to other Greek areas, and services, facilities and infrastructure, e.g. telecommunication, transportation, health, water-supply etc., created for tourists are also used by the local community.

4.4 CONCLUSION

Crete has a competitive advantage in tourism when compared to most Mediterranean destinations. It has everything that a major tourist-receiving destination should have plus celebrated history and monuments, natural beauty and the hospitality of the Cretan people. New investments to build up the tourist industry favour the local economy, and tourism today plays a major role in generating income and employment, the expansion of other industries' output, public sector revenue, interruption of emigration, promotion and development of cultural facilities and international co-operation and relations. As a result, Cretans today are better off than their ancestors, although many problems have resulted from uncontrolled tourism development and the domination of the island's tourism industry by package tourism.

A pivotal role in tourism development during the early phases of tourism development was played by the local elite, although later some investments were made by non-Cretans. Thus, development was not autonomous since some capital has been invested by expatriates and a high degree of dependency exists on foreign tour operators. Development conforms with the diffusion paradigm, since socio-economic structures have changed, the society has lost some control of local resources and some internal structures have been replaced by Western European structures. Similarly, the economy saw a shift from traditional agriculture to tourism orientated. However, in comparison to other island destinations world-wide, e.g. the Caribbean and Pacific islands, local control of development is high in some tourism sectors, mainly in accommodation and sea transport. However, regional imbalances exist with almost half of the island's tourism industry concentrated in the Prefecture of Heraklio and very low tourism activity on the southern part and the hinterland of the island.

To sum up, Crete is the most dynamic Greek tourism destination with great potential for further development of the tourism sector. Cretan hospitality and the abundant resources of the island allow the island to satisfy many kinds of tourist preferences. Unfortunately, many Cretan areas have experienced over-

development with negative environmental and social impacts emerging from uncontrolled planning, lack of co-ordination and insufficient involvement of the private sector and the local community in the planning process, as the next chapter highlights.