Profile of Sustainability of a tourism destination in Spain: case study of Torremolinos (Andalucía)

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ABBREVIATIONS LIST

IEA – Institute of Statistics of Andalusia (Instituto de Estadística de Andalucía)

SIMA – Multi territorial Information System of Andalusia

INE – National Institute of Statistics (Instituto de Estadística Español)

SOPDE - Society for Planning and Development

BPHS – Blue Plan Hotel Survey

GWTP – Guadalhorce Wastewater treatment Plant

DTAI - Daily Traffic Average Intensity

AHECOS – Association of Hotel Entrepreneurs of the Costa del Sol

Introduction

The objective of the Profile of Sustainability in Torremolinos is to elaborate a study that can measure and evaluate the development of tourism and relate it to the sustainable development of the destination. It is therefore imperative to assess the economic, social and ecological impact of the tourism in the destination and to identify the way to improve tourism development in order to see how it affects the welfare of local populations.

The methodology is based on the model of indicators "DPSIR" and highlights the link between the performance and the impact of tourism in Torremolinos. To analyze the indicators system from the previous progress reports, tourism was considered as a "driving force"; from this point forward, we have measured the global and partial results obtained for Torremolinos, evaluated according to the three pillars of sustainable development. Secondly, we estimated the "Impact" of tourism development and the current sustainability 'status' in the destination. Finally, we present the measures or political "answers" implemented by the various public administrations and private enterprises, which have improved the "status" and "impact" on the destination and which have affected the status of sustainability in Torremolinos. The key is to determine the extent to which tourism activity has influenced the evolution of economic wealth, the structure of the local economy, the evolution of the population and income distribution, as well as the availability of drinking water, soil quality, biodiversity, landscape and other environmental components.

In short, tourism has been since the 60s the single most important driver for local and regional economy and the social and environmental changes in Torremolinos. In the 50s Torremolinos and the Costa del Sol were an area with an underdeveloped economy based on subsistence fishing and a very slow productive agriculture, where economic and social inequalities and the lack of employment opportunities stimulated emigration. Tourism development has consolidated Torremolinos and the Costa del Sol as a mature first class destination which enjoys international recognition and a leadership position; Torremolinos has come to represent the most economically active area in the province of Malaga and one of the most important in Andalucía, placing itself in a top position at provincial level in terms of employment generation and income level. Torremolinos is also a leader in overnight stays, in the accommodation offer, the products diversification, etc.

However, tourism development has also generated less positive changes and impacts. The rapid and uncontrolled growth of the Costa del Sol in the sixties and seventies caused environmental pressure, which has been evidenced by the risks of the development model that the destination had been previously applied. Over time, the tourism model has evolved to adapt to new market trends but with this, impact and territorial changes were becoming more obvious. Thus, since the beginning of this century the loss of competitiveness and profitability that is becoming evident, together with the environmental degradation generated by an expansive unlimited growth calls into question the sustainability of the development model.

The intervention in the environment has had such an important negative impact that some elements (water courses, beaches, soil erosion ...) are irrecoverable, without a radical change in the outlook of the development model; this led to a low environmental sustainability. From the social point of view of this analysis, the result is more satisfactory; tourism has enabled more jobs, a better job security, women's employment opportunities, increase in the level of education and culture, multiculturalism; social change has been so significant that society is radically different since the arrival of tourism in the 60s. Undoubtedly, there are negative aspects, such as job instability, the income per capita is not very high compared to other places in Andalusia and Spain, and even the foreigners' integration in the society involves major conflicts, the segregation of different social groups.

Finally, sustainability under the economic aspect is what has been most successful; from the subsistence economy during the 50s in the last century, to a modern, service-based economy, with a high benefit for the companies. However in recent years, these economic benefits are beginning to be questioned or at least are clarified, because although the profitability of tourism is obvious, the ever increasing number of travelers leads to more public and private expenditures, while the income remain modest. This gives us a clearer image of the profile of sustainability of Torremolinos.

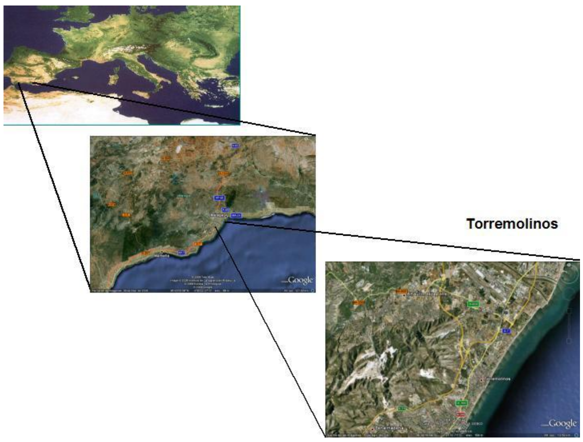
The short term measures are appropriate and correct: increasing the average length of stay, raising the hotel prices, promoting a more "pocket spending" in the destination, diversifying the markets ... but these changes are slow, risky and do not only depend on the actors in the destination. There are other faster and more economically viable "answers" on the short-term: to increase the number of tourists by involving more marketing techniques (sometimes seek cheaper but more stable segments) and increase the accommodation supply, especially housing (the increase in residential tourism affects hotels because of the competition that it supposes). That is, the measures proposed are actually, the "causes of the problem", as the study demonstrates. These measures are useful for the budgets of the municipality and the real estate businesses but what about the quality and sustainability of the tourism? The price of a hotel room can not be increased unless it brings along an increase in the quality of the destination, and quality does not mean more construction.

1. Tourism as a driving force in Torremolinos tourism destination

1.1 Localization and geographic characterization of the tourism destination

Torremolinos is a municipality integrated into the “Costa del Sol” tourism brand, boasting a consolidated and mature stage, and having experienced a constant transformation process in the life cycle of the product. It is situated in the southern coastal area of Spain, in the region of Andalucía, more exactly, in the western part of the province of Malaga; its geographical position is 36º 38´ and 36º 28´ N latitude and 4º 28´ and 4º 30´ W longitude. It borders the Mediterranean Sea in the south and southeast, the Mijas mountain range and the Valley of Guadalhorce in the North, Benalmádena in the west (which is another municipality of the Costa del Sol), and the city of Malaga in the north-east. This area totals a 20,4 sq km area, with 5.4 km of coastline, a residential population of 63.077 inhabitants in 2008 and an average density of 3.092 inhabitants per sq km.

Figure 1: Localization of the studied area



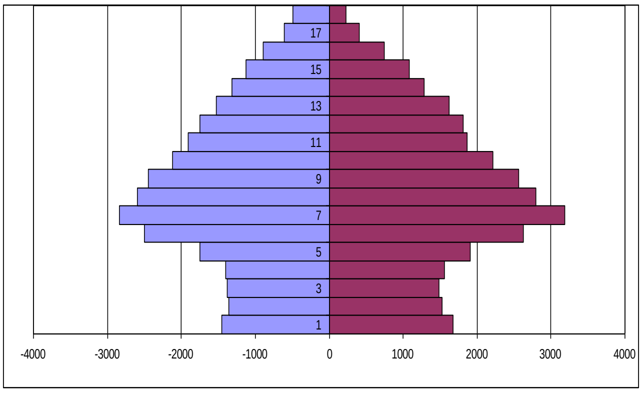
Source: GoogleMaps. Own elaboration

The population in the studied area is very dynamic. The 2007 data revea a young society (19 % of the inhabitants are younger than 20) in a western society (13 % of the inhabitants over 65), which supposes that the dependent population registers a low percentage, with moderate birth rates (10%) as it is shown in the chart 1. The migration balance is positive and highlights a multicultural society, as more than 26 % of the official residents are foreigners, with British predominating.

The economy depends almost exclusively on the tourism, directly or indirectly, as other sectors (commerce, construction, etc.) are profitable due to the arrival of a seasonal population. Other relevant data show that 84 % of the population work in the services sector, only 1 % in agriculture and 5 % in the industry sector (excluding construction); the hotel and restaurant industry sector totals 21 % of employment, commerce 20 % and construction 9 %.

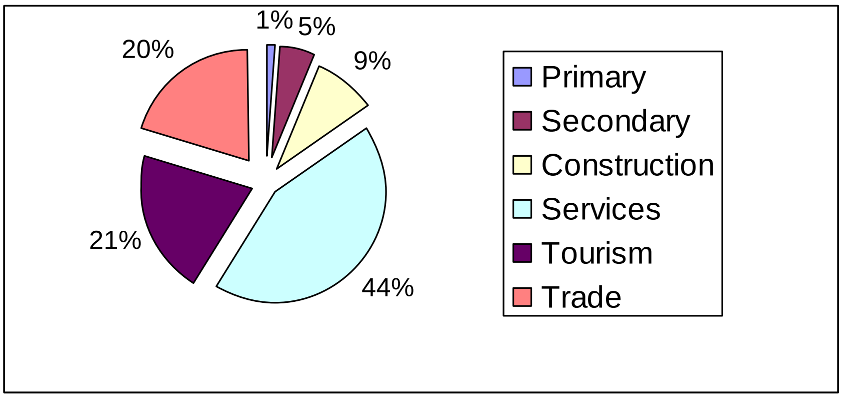
The data also show that Torremolinos has a stronger and more dynamic economy than other areas of the Costa del Sol and Spain. It has been successfully answering the cyclical changes of the capitalism, as the following very low unemployment rates reveal (4-5 % of the population) compared to the chronic unemployment rate in Spain, as well as the family income rate per capita (between 9.300 and 10.200 Euros in 2003), higher than in other areas of the Costa del Sol and the region of Andalucía. These numbers have still a long way to go until being able to equal some industrial and services areas from Madrid, Cataluña, Navarra and País Vasco or the tourist areas of the Baleares Islands.

Chart 1: Population pyramid



Source: IEA. Own elaboration

Figure 2: Occupied population by economic activity



Source: IEA . Own elaboration

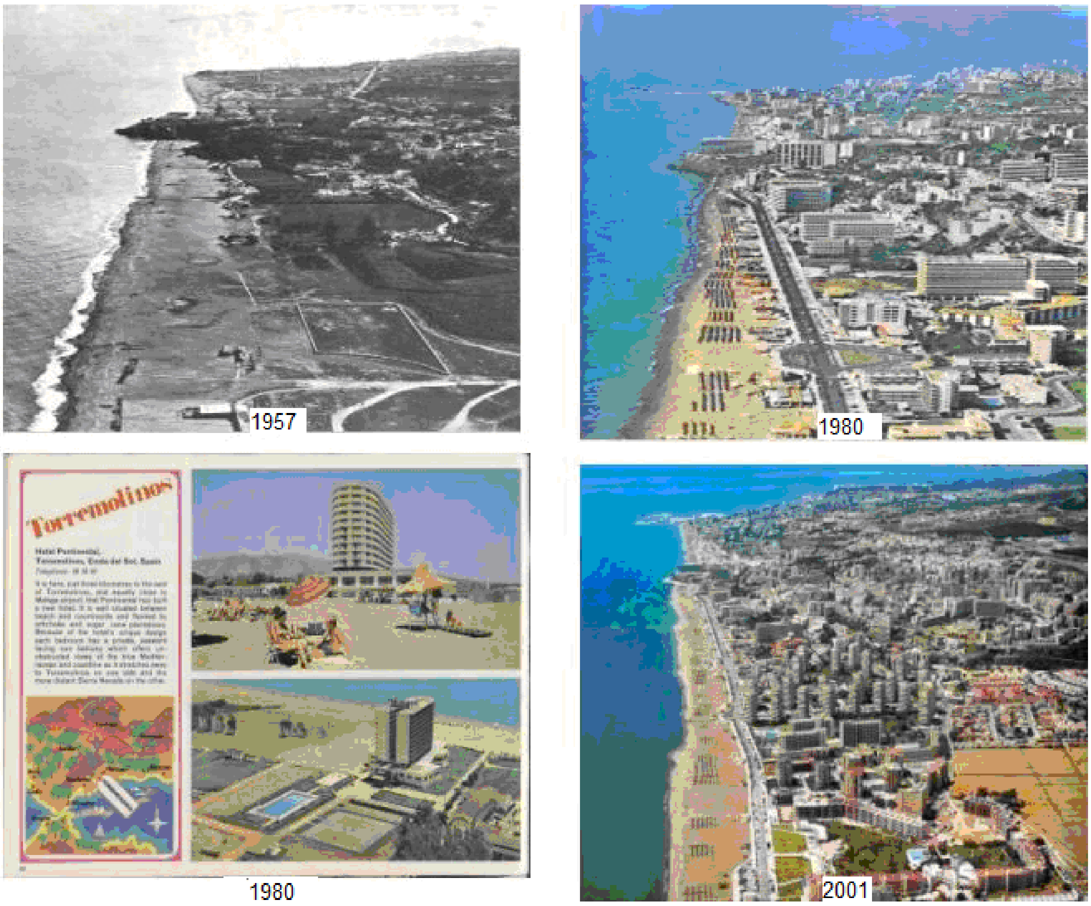
As regards the environment, there are three distinguishable and well differentiated environmental and landscape units in Torremolinos: the coastline mountain range, the foothills and the plain.

The Mijas mountain range constitute the highest area, where the unevenness of the land vary between 500 and 1.000 m with a 40 to 80 % slope, making possible the existence of a visible mountainous group, due to the small distance between the sea and the mountain area (1.5-1.8 km). The complex network of faults, the strong tectonic grind of its marmoreal lithology and its specific dissolutions form a complex structure of pine and thicket. This lithologic and geologic structure gives birth to karstic springs with abundant water reserves that constitute supplies for the population as well as a natural limit for future urban developments.

The foothills represent the southern area of the Mijas mountain range with an average width of 0.5 km and smoother slopes (10-20%). This unit is completely justified from a landscape, rather than from a structural and lithologic point of view, as the perception of a steep, undeveloped mountain contrasts with a highly developed foothills where the nice views/perspectives have awarded a high market value to the space.

Figure 3:

Evolution of Torremolinos 1957-1980-2001 and the position of a hotel in the beach area



Source: Municipal Archives. Own elaboration

The alluvial plain is narrower than the foothills and originates from the different watercourses that have been providing the necessary materials for the creation of the coastal plain and the beaches, with a 100% occupation. This area comprises the major environmental degradation. There are three important elements that can help understand the actual configuration of the beaches and the strong negative impacts this configuration has:

1) The geological characteristics determine the narrowness of the beaches (Serrano Bueno, 1998) because the submerged areas of the Baetic Cordillera (Costa del Sol mountain range) gain in depth rapidly, due to the fractures system.
2) The morphologic dynamic processes induced by the geological characteristics (a high slope in the submerged platform) and by the waves form and direction determine that a great number of local beaches easily enter a decline process (Malvarez, 1999).
3) The human actions have favoured two processes, which are (1) cutting off or diminishing the natural supplying of the watercourses (narrowing or piping of the watercourses, deviation…) that would compensate the inevitable erosive processes and (2) changing the natural morphologic dynamics of the accumulation processes and erosion of the coastline caused by the creation of infrastructures (Benalmádena Marina, coastal sidewalks…) and of the different action to "protect" the beaches (breakwater…).

The climate is one of the determinant factors of the tourist activity of Torremolinos. The benign climatic conditions with low rainfalls, which exceed 500 litres annually concentrated in autumn and spring, and the average annual temperatures over 18ºC, make possible a series of recreational activities not only during the summer, spring and autumn seasons, but also during large periods of the winter season, helping reduce the seasonality by amplifying the touristic season.

As for the transport connections, Torremolinos does not have a train station, nor an airport or a trading port, but its proximity to the municipality of Málaga provides it with a well consolidated international communications system. The airport is the main entrance for the tourist flows and has a great importance. In 2007, the airport of Málaga ranked fourth in Spain in terms of passengers´ volume (13.590.803) and the transactions made (129.698), with the British market leading this segment, followed by Spanish, Germans, Irish, French and Dutch among the other sixty different nationalities. Torremolinos is situated only 2 km away from the Málaga airport and this proximity is one of the historic reasons responsible for its touristic development.

The new train station of Malaga, inaugurated in 2006, has multiplied its passengers' capacity up to 24 million per year, and has added extra services, introducing the High Speed Train (AVE), traditionally one of the most important transport connections in Spain. The passengers´ volume exceeded one million persons in 2007 and the proximity train, with 10 minutes length trip duration is the main transport connection with Torremolinos. As for the seaway connections, the port of Málaga starts to be a reference in Spain as it becomes the second cruising port, consolidating its position as a port of call and a main port. Moreover, it has a regular line with the North of Africa (Melilla and Ceuta are Spanish cities in Morocco).

It is essential that we should now take a look at the connections by land, which are the main entrance to Torremolinos. The main communication route is the National Road 340 that splits in two from Málaga (340a and 340b) as it can be seen in the photo, and which is now being completed with a third route. Therefore, the communication routes of Torremolinos highlight an excellent radiography, due to their capacity, importance and diversity.

Figure 4 and 5: Communication routes in Málaga and Torremolinos

Source: Google Maps. Own elaboration.

In spite of its extremely southern localization in the Mediterranean, its infrastructure put Torremolinos in an advantageous position compared with other destinations. From the environmental point of view, Torremolinos has undergone a serious transformation of its territory: the dynamics of the regeneration process of the beaches has failed, which supposes that millions of Euros need to be inverted yearly in order to have the minimum sand area required for the tourism activity, the watercourses are completely modified (dammed, deviated or canalized through big pipes), the aquifers have been overexploited and the natural and wooded areas have disappeared, except for some pines and Mediterranean thicket areas. The society is radically different; the tourism has generated a multiculturalism reflected in the strong immigration process (the so called "climate-prone immigrants") in the middle of a cosmopolitan society, with 88% of its inhabitants having been born outside the municipality.

1.2 Tourism structure of Torremolinos

1.2.1 Origins and importance of tourism in Torremolinos

Torremolinos is one of the most emblematic municipalities in what concerns the tourist development of the Spanish coastline. This development stemmed from the so called tourist boom at the end of the 50s, making possible the conversion of a small town of farmers, sailors and flour merchants to one of the most important tourism destination in Spain and the Mediterranean, experiencing an intense touristic as well as urban development.

The first tourism initiatives started in the 30s, with the conversion of the Santa Clara country estate in a residence for foreigners. With the start of the tourist boom in the 50s, a series of other hotels are inaugurated, such as Los Nidos Hotel in 1955, followed by the Pez Espada Hotel in 1959, the first luxury hotel on the coast, also responsible for the denomination of Costa del Sol brand. The major growth and tourism development take place in the 60s, and nowadays, Torremolinos represents the main tourist town of Andalucía, with the most important accommodation offer in the whole autonomous region.

As a result, Torremolinos constitutes the most economically active area of the province of Málaga, one of the main engines of Andalucía, being at the top of the list in aspects such as employment, income level, etc. Thus, Málaga is the Spanish province registering the major economic growth during 1995-2003, contributing with 29% to the total of Andalusia economy, and has been for the eleventh consecutive year the leading province in Andalucía in terms of creation of companies, and entrepreneurship density in the region.

1.2.2 The accommodation offer: hotel requalification and the importance of the tourist housing

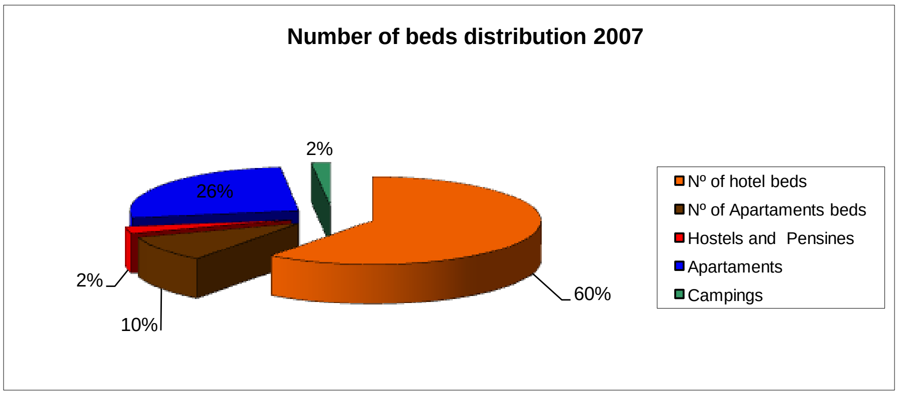
The tourist accommodation offer of Torremolinos is the most important in terms of volume of beds and number of establishments in its proximity (Málaga and Andalucía), with 10%, and, respectively, 7% of the number of beds in Andalusia (IEA, 2007).

In 2007, the number of beds in establishments across Torremolinos is mainly concentrated in hotels, with a 60% of the total official accommodation offer, followed by the apartments (26%) and, in smaller percentages, the apart-hotels (10%), the hostels and pensions (2%), and one camping (2%).

The evolution of the total number of beds shows an increase of 13.2 % from 1989 to 2007, from 24.922 to 28.250 beds.

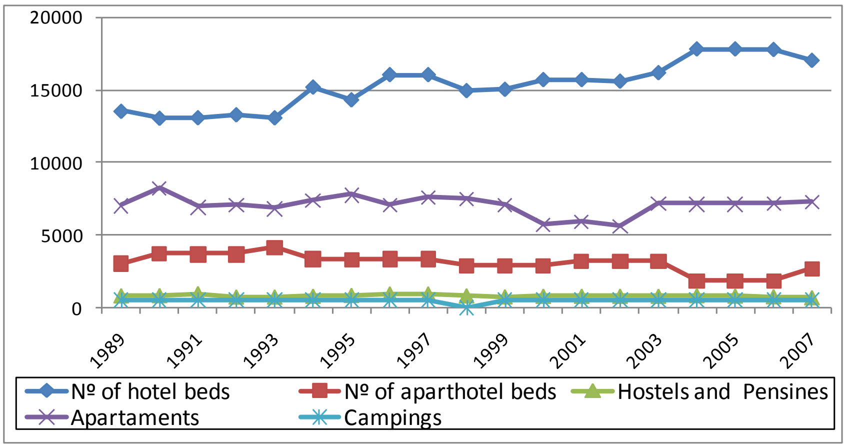
Generally speaking, the number of beds presents a slow increase during the studied period (13.25%), because we need to take into account that the most important development of tourist offer of Torremolinos occurs in the previous decades of the 60s and the 70s.

Figure 6: Number of beds distribution



Source: IEA

Figure 7. Number of beds by types



Source: IEA

The evolution during these years varies according to the type of accommodation. The number of hotel beds increased from 13.504 in 1989 to 17.012 in 2007, which means an increase of 26% over the 18 years. The evolution of the apartments and apart-hotels present a more varied trajectory, with falls of 40 % from 2003 to 2005 and increases of 44% during 2005-07, caused by an internal re-structuring. The number of beds in hostels and pensions, smaller compared with the other categories, registers a decrease of -15.7% during this period.

Due to the commercial and territorial importance of the Hotels, the investigation will analyze the distribution and evolution of this type of establishment. Thus, we can see that from 1989 to 2007, there has been no significant increase in the number of beds (13 %), and there has been almost no variation at all (-0,68 %) during the last ten years (1997-2007). Nevertheless, there have been significant internal changes, with a considerable increase of establishments and number of beds in 4 stars hotels and a significant decline in the number of beds of 1, 2 and 3 stars hotels. During the 1989-2007 period, the number of beds increased from 3.073 to 10.770 in hotels of superior categories (4 and 5 stars), which supposes an increment of 250 %[1]. At the opposite, the number of beds in 1, 2 and 3 stars Hotels reduced with 38.75 %, from 13.267 in 1989 to 8.126 in 2007. In conclusion, quality has primed, with the conversion of lower rated to higher rated hotels.

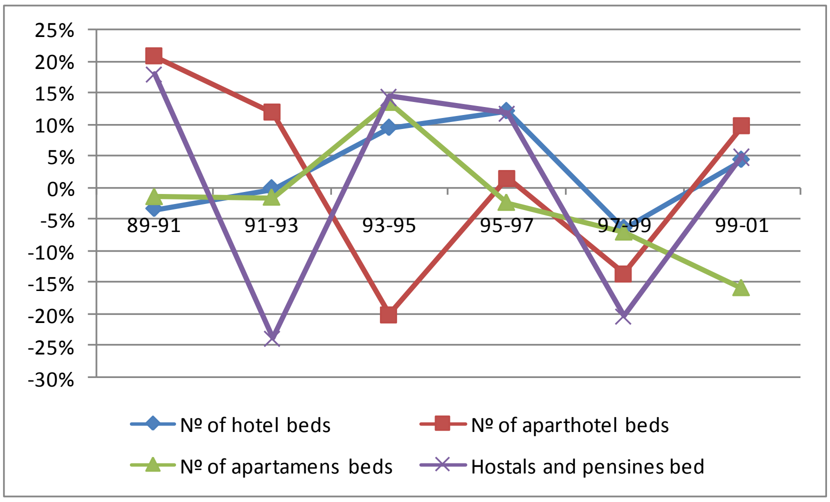
[1] The only 5 stars hotel disappeared in 1992 and although a high luxury hotel project was elaborated, the works have been paralyzed since 2008.

Table 1: Number of beds per type

Year	Total Nº	Nº of hotel beds	Nº of aparthotel beds	Hostels and Pensions	Apartments	Campings	Annual variation Total
1989	24944	13504	3063	835	7042	500	
1990	26341	13026	3745	847	8223	500	5,60%
1991	25192	13063	3700	985	6944	500	-4,36%
1992	25277	13267	3700	751	7059	500	0,34%
1993	25291	13057	4142	751	6841	500	0,06%
1994	27219	15172	3367	804	7376	500	7,62%
1995	26738	14296	3316	859	7767	500	-1,77%
1996	27951	16028	3367	960	7096	500	4,54%
1997	28443	16028	3367	960	7588	500	1,76%
1998	26196	14928	2911	829	7528	500	-7,90%
1999	26250	15018	2911	765	7056	500	0,21%
2000	25588	15687	2894	803	5704	500	-2,52%
2001	26126	15687	3196	803	5940	500	2,10%
2002	25718	15580	3196	803	5639	500	-1,56%
2003	27854	16164	3196	803	7165	526	8,31%
2004	28183	17797	1892	844	7148	502	1,18%
2005	28154	17797	1892	815	7148	502	-0,10%
2006	28136	17759	1892	773	7210	502	-0,06%
2007	28250	17012	2728	704	7304	502	0,41%
Dif 2007-1989	13,25%	25,98%	-10,94%	-15,69%	3,72%	0,40%	

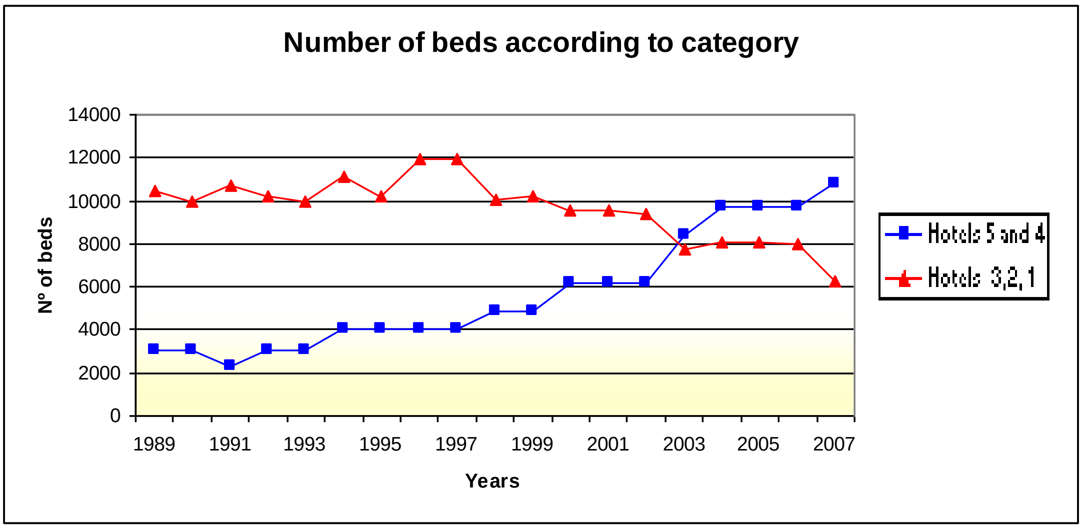
Source: IEA

Figure 8: Evolution of the number of beds by type 1989-2007



Source: IEA 2009.

Figure 9: Number of beds according to category



Source: IEA

Table 2: Number of establishments by category

Year	Total	Hotels 5 and 4 stars	Hotels 3, 2, 1 stars	Hotels/ apartments	Hostels and Pensions	Camping
1989	85	7	42	7	28	1
1990	84	7	39	8	29	1
1991	81	6	40	7	27	1
1992	81	7	41	7	25	1
1993	80	7	39	8	25	1
1994 *	84	9	40	8	26	1
1995	80	7	37	6	29	1
1996	92	7	44	7	33	1
1997	93	7	44	7	34	1
1998	83	9	39	5	29	1
1999	82	9	40	5	27	1
2000	83	12	38	5	27	1
2001	83	12	37	6	27	1
2002	83	12	37	6	27	1
2003	84	17	33	6	27	1
2004	89	20	35	4	29	1
2005	88	20	35	4	28	1
2006	85	20	34	4	26	1
2007	82	20	32	5	24	1
Var 89-07	-3,53%	185,71%	-23,81%	-28,57%	-14,29%	0,00%

Source: IEA.

The evolution of official accommodation supply facilities does not follow the same trend as the number of beds. The number of official accommodation establishments of Torremolinos has decreased by 3.5%, while the number of beds increases slightly; this means that together with the upgrading of the offer, the company size also becomes larger as it descends the types of small-sized and family-run businesses. The effect of loss of market for small family business structures is not unique to the area of analysis, it also occurs on the Costa del Sol and in Spanish Mediterranean destinations (Navarro, 2006). A good indicator is the ratio places / establishment that goes from 293.5 in 1989 to 344.5 in 2007.

In conclusion, one of the most significant aspects of a study of the accommodation offer in consolidated destinations is the importance of other types of private establishments (according to the World Tourism Organization terminology). Torremolinos, as well as the Costa del Sol and all the Mediterranean Spanish destinations, is characterized by the abundance of tourist housing as the predominant accommodation type of offer[2].

Torremolinos, like the Costa del Sol and other destinations in the Mediterranean, is characterized by an abundance of housing of potentially touristic use, which is the predominant accommodation supply as evidenced by the statistics. The number of private accommodation is estimated between 55.500 and 74.000, which is double or triple of the remaining official accommodation supply. This fact implies that the real volume of tourists, especially in the busiest months, is much higher than official figures of visitors in hotel accommodation.

Table 3: Number of private establishments

	Total	**First home**	**Second and unoccupied homes**	**Evolution 1991-2001**	**Nº of beds (x3)**	**Nº of beds (x4)**
1991	28119	9504	16152		48456	64608
2001	34238	17032	16040	-0,69%	48120	64160

Source: Household census 2001 and 1991, SIMA

1.2.3 The indicators of the demand

1. Hotels occupation rates and seasonality

Except for some positive data, the average annual occupation rate in the last ten years presents a considerable decline, passing from 82.2 % in 1999 and 84.3 % in 2000, to a 70.7 % in 2007, and a tendency to a major cutting, with an occupation rate of 67 % in 2008 and only a little more than 60 % in 2009.

By using the monthly data of this indicator, we can analyze seasonality, one of the most prominent characteristics of the tourist activities, in terms of its negative effects. In order to reduce the seasonality, businessmen and public administrations from Torremolinos and Costa del Sol are making a triple effort, by increasing the promotion, by creating new tourist products with the aim to diversify the recreational options of the destination and by specializing in the different segments of the demand.

[2] It is difficult to quantify the number of accommodation establishments with a potential tourism use because the statistics do not register nor control them. We must consult secondary sources in order to get a closer look at the phenomenon. In Spain, the accommodation census realized every 10 years (the last one in 2001) registers different types of houses (main residence, second home, unoccupied etc.); in other well consolidated destinations like Torremolinos, the accommodation with a tourism potential use are the second and unoccupied homes, and to count the number of beds it is estimated that each house can have 3 or 4 beds (Subdirección General del Instituto de Estudios Turísticos, 1987).

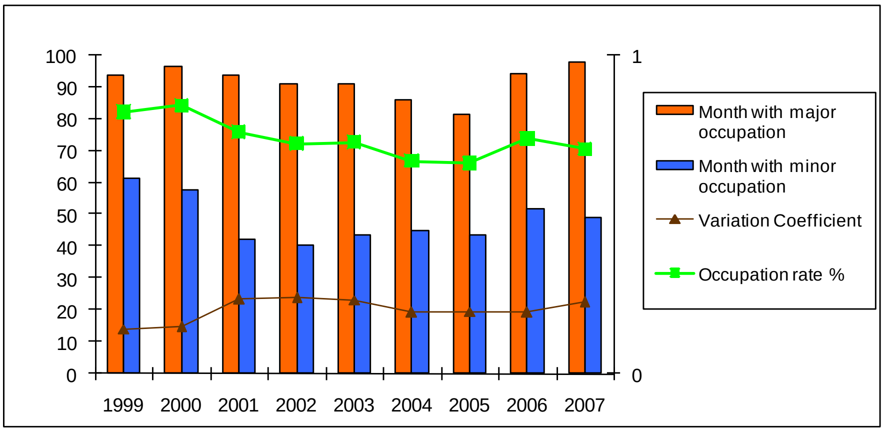
Table 4: Monthly Hotel Occupation Rate

Month/years	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
December	61,71	63,14	42,37	42	45,06	50,06	43,71	54,19	50,95	40,11
November	73,44	76,6	57,71	59,83	48,67	54,99	57,98	60,07	56,83	50,53
October	81,77	79,92	70,31	71,36	72,26	64,52	63,22	74,67	69,97	64,58
September	93,19	95,95	89,8	86,29	84,48	78,69	81,67	81,56	84,6	80,26
August	94,04	96,56	93,63	91,19	91,19	86,06	80,99	91,3	98,05	89,14
July	93,18	90,93	89,76	86,69	82,93	77,34	80,33	94,4	89,28	86,91
June	88,28	91,26	87,41	77,9	80,93	76,81	73,27	82,46	77,4	77,06
May	80,38	86,22	76,13	72,36	77,08	65,54	63,58	72,77	60,51	70,67
April	83,4	87,48	79,56	72,86	78,24	62,76	55,52	70,18	66,37	61,75
March	74,91	86,56	80,1	76,4	69,62	65,41	60,77	69,11	64,71	60,72
February	75,55	77,81	64,64	57,38	63,44	56,26	60,49	59,13	59,43	56,49
January	61,22	57,77	46,46	40,49	43,8	44,93	48,27	51,76	49,03	46,65

Source. INE

Apart from all of the above, Costa del Sol has committed itself, starting with the 80s, to create other highly profitable products like the golf tourism, and, although Torremolinos has no golf camps, it can draw benefits from this type of tourism, due to its proximity to the camps of Benalmádena or Mijas. The success of this strategy has been so strong that "Costa del Sol" is now known as Costa del Golf, for the considerable number (more than 30) and the concentration of the golf camps. An important data to take into account are the relations between the creation of the golf camps and the selling of the country houses, relations that transformed the territorial model of the coast and created certain negative impacts which start to be critical (water necessities in a mediterranean environment, transformation of spaces with high environmental value, etc).

Figure 10: Occupation rate and seasonality



Source: INE

Nevertheless, in spite of all the strategies and actions taken, the fight against seasonality continues to be far away from a definite solution. In the above graphics we can see the difference between the occupation rate during the months with major occupation, that is, the summer months, normally August, and the months with minor occupation, which is generally January.

The annual occupation rate, represented in the above graphics with a green curve, decreases 11.5 points from 1999 to 2007, passing from 82 % to a 70.7 % in 2007. This rate will continue to decrease in 2008 to a 67.1 % and the tendency is expected to maintain in 2009. All this can lead to the closing of hotels in order to adapt better to the demand and, especially, increase the number of hotels that close during the low season (winter), which means a significant loss of employment and a smaller wealth generation.

Seasonality has been measured with the variation coefficient or Pearson coefficient[3]. This measuring instrument is based on Pigon-Dalton condition that is interpreted as a lower coefficient of variation (ranging from 0 to 1) reduces the seasonality; however, the higher the rate will be the higher the seasonality. As shown in Table 5, there is less seasonality in 1999 (0.14 points) than in the rest of the year, being the highest in 2002 (0.23).

Table 5: Occupation rate and seasonality

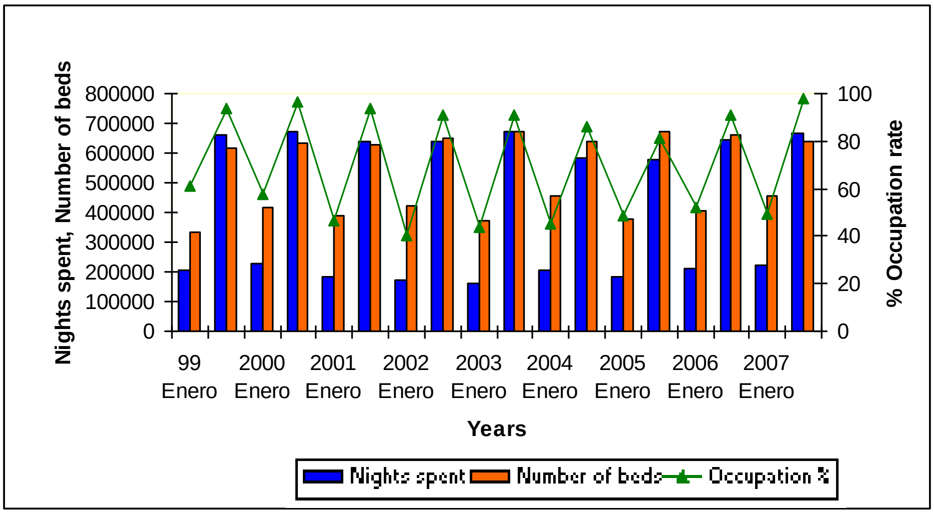
Years	Month with major occupation	Month with minor occupation	Difference Month with major and minor occupation	Variation Coefficient	Occupation rate %	Difference
1999	94,04	61,22	32,82	0,141	82,22%	
2000	96,56	57,77	38,79	0,148	84,37%	2,15
2001	93,63	42,37	51,26	0,235	75,90%	-8,47
2002	91,19	40,49	50,7	0,238	72,25%	-3,65
2003	91,19	43,8	47,39	0,232	72,73%	0,48
2004	86,06	44,93	41,13	0,192	66,85%	-5,88
2005	81,67	43,71	37,96	0,196	66,14%	-0,71
2006	94,4	51,76	42,64	0,194	73,96%	7,82
2007	98,05	49,03	49,02	0,224	70,69%	-3,27
Variation 99-07			16,2			-11,53

Source: INE

One of the worst consequences of the seasonality is the duration of the tourism period, as some of the tourism installations remain closed during large periods, and this increases the underutilization and inactivity rates of the municipality and, above all, of the population working in the industry. In order to understand better these values, we shall make a comparison between the number of nights spent, the occupation rate and the available number of beds, taking into account the month with the minor demand (January) and the month with the major demand (August).

[3] The variation coefficient (V.C.) can be obtained as the quotient between the standard (s) and the average (Y) variation. This is s tool that measures deviations in comparison with the average, as it is based on the variation. As the variation depends on the average level of the measured variable, the variation coefficient intends to eliminate this influence by using the average in its denominator.

Figure 11: Nights spent, number of beds and occupation rate



Source: INE and IEA

2. Number of nights spent in hotels

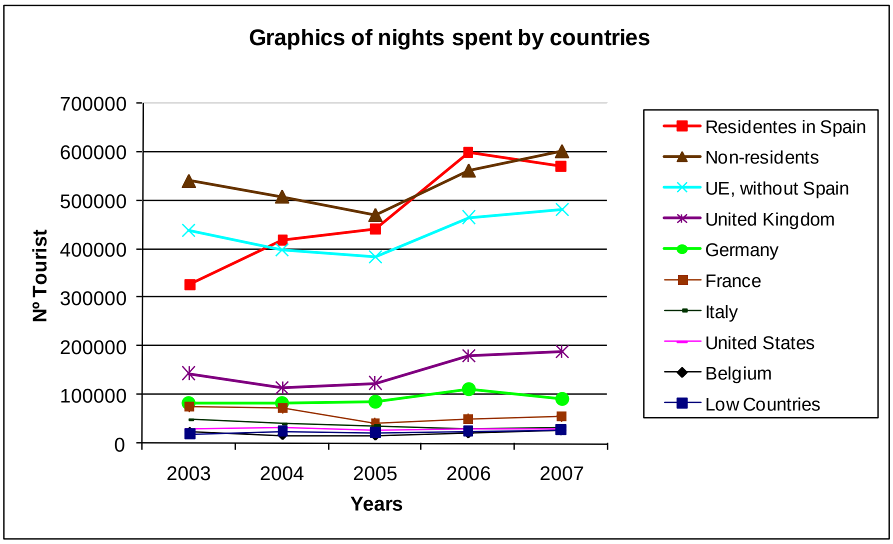
As it was expected, the annual number of nights spent in Hotels also presents a decrease of 5 % during the period we are investigating. In a more detailed analysis, we can know the number of nights spent by nationality from 2003 onwards and analyze their dynamics. All the data gathered reveal us the importance of the Spanish tourists. Nevertheless, this positive aspect has not succeeded to make for the gradual loss in the number of nights spent by international tourists, which presents an important decrease during 2004 and 2005 (-6.8 %), slowly recuperating between 2006-07 (14.2 %); this recuperation can be explained by the increase in the demand from the United Kingdom, starting from 2005, and the decline of the German demand from 2006-07.

Table 6: Number of nights spent in hotels and their evolution

Years	Nights spent	Difference previous year
1999	5.177.878	
2000	5.330.346	2,94%
2001	4.973.106	-6,70%
2002	4.847.096	-2,53%
2003	4.915.604	1,41%
2004	4.580.677	-6,81%
2005	4.470.801	-2,40%
2006	5.107.521	14,24%
2007	4.916.305	-3,74%
Dif % 07-99		-5,05%

Source: INE

Figure 12: Graphics of nights spent by countries



Source: INE

3. Average trip duration in hotels and apartments

Just as in the case of the occupation rate, the average trip duration also presents a constant but moderate decline, with some not significant peaks, and a loss of an average of one day (1.34 days) in hotels during 1999-2007. The evolution is more moderate in the case of the apartments, with average trip duration of 9.66 days in 2003 to 9.62 in 2007.

Table 7: Average Trip Duration in Hotels and Apartments

Year	Spain Residents in Hotels	Non residents in Hotels	Total in Hotels	Apartments
1999	..	..	5,53	..
2000	..	..	5,48	..
2001	..	..	5,57	..
2002	..	..	5,24	..
2003	3,9	..	5,66	9,66
2004	3,89	5,81	4,94	10,88
2005	4,08	5,69	4,91	10,55
2006	3,67	5,17	4,4	10,28
2007	3,39	4,94	4,19	9,62

Source: INE

Given the lack of data related to the tourists´ origin before 2003, we have been forced to restrain to a more partial analysis; even so, the conclusions that can be inferred are very interesting. There is an important difference between the values registered by apartments (10 days average trip duration), and the hotels (four and five days). This is not surprising if we take into account the different functions that each of these two categories fulfil. As regards the origin, the "residents" and "non-residents" have an almost parallel evolution, although the latter have longer trip duration, with almost two days.

4. Tourists´ arrivals to hotels and apartments

The tourists´ arrivals to Hotels present highly positive values in some years, such as 27.5 % between 2005 and 2006, values that have compensated the decline in the average trip duration. This is not the case for the apartments, which present a negative, although variable evolution. The tourists´ arrivals to hotels decline with 14 % in 2008 (1.007.299), and it is expected that the same tendency should continue in 2009.

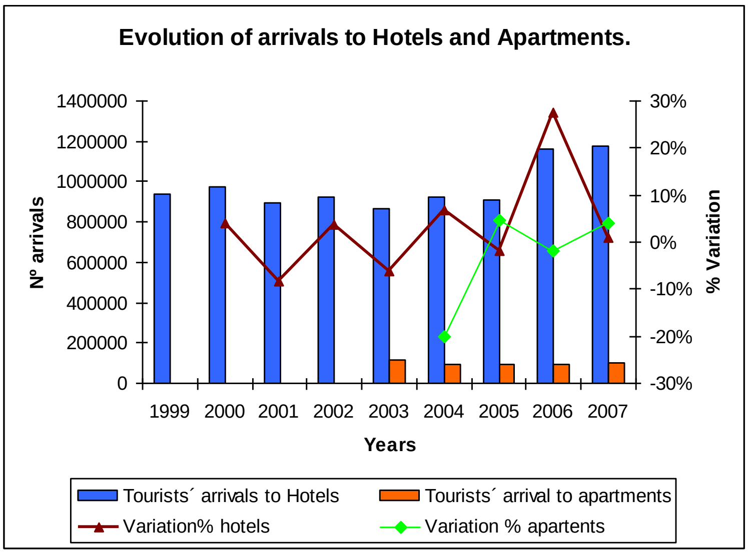
Table 8: Tourists´ arrivals to Hotels and Apartments

Years	Tourists´ arrivals to Hotels	Tourists´ arrival to apartments	Variation % hotels	Variation % apartments
1999	935653	..	..	..
2000	972833	..	3,97%	..
2001	892388	..	-8,27%	..
2002	924144	..	3,56%	..
2003	867815	114599	-6,10%	..
2004	926705	91686	6,79%	-19,99%
2005	910636	95997	-1,73%	4,70%
2006	1161512	94145	27,55%	-1,93%
2007	1173499	97872	1,03%	3,96%
Dif 07 -99	237846	-16727	25,42%	-14,60%

Source: INE, * No data.

In order to understand the importance of Torremolinos inside Costa del Sol, we shall compare the number of arrivals to Hotels for both of them. Among the 16 municipalities that form Costa del Sol, Torremolinos alone receives more than 25 % of these arrivals, more than other emblematic tourist towns like Marbella or Malaga. As for the evolution, during these last years, the growth tendencies and the dynamic of the changes have been similar, with an increase of more than 25 % for both areas.

Figure 13: Evolution of arrivals to Hotels and Apartments



Source: INE

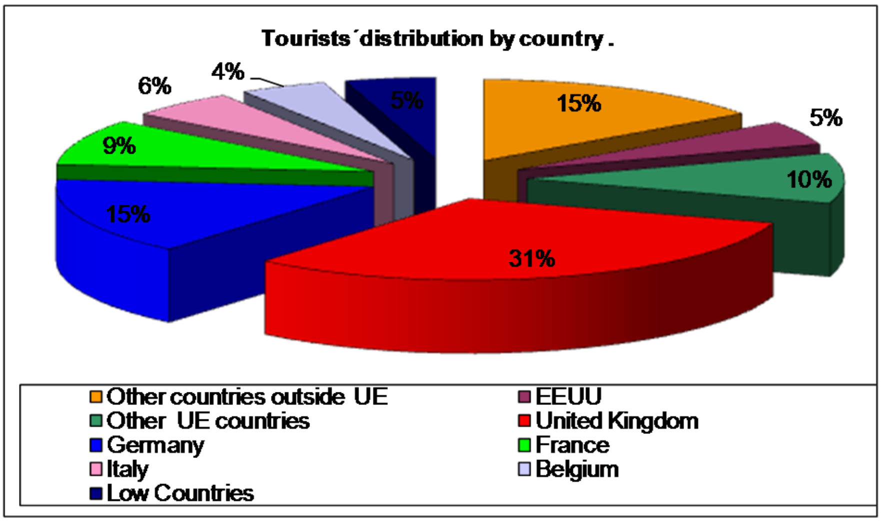
Figure 9: Tourists´ arrivals for Torremolinos and Costa del Sol

Years	Tourists Hotels Torremolinos	Tourists Hotels C. SOl	Percentage %	Var % Torremolinos	Var % C. del Sol
2002	924.144	3.374.136	27,39%		
2003	867.815	3.652.130	23,76%	-6,10%	8,24%
2004	926.705	3.591.112	25,81%	6,79%	-1,67%
2005	910.636	3.790.999	24,02%	-1,73%	5,57%
2006	1.161.512	4.259.257	27,27%	27,55%	12,35%
2007	1.173.499	4.333.236	27,08%	1,03%	1,74%
Var 07 -02				26,98%	28,43%

Source: INE

Another very characteristic and positive aspect is the great diversification of the demand according to the country of origin; thus, analyzing for example the year 2007, it strikes us the important weight that the European Union countries have, totalling 41 % of the tourists. As for the international demand, the countries outside the European Union suppose a 20 % of the total number of arrivals, with United States registering a 5 %, as the main issuing country outside the EU. Nevertheless, the main issuing countries for the Costa del Sol as well as Torremolinos are the United Kingdom, with 32 % of the foreign tourists in 2007, followed by Germany with 15 % and France with 9 %.

Figure 14: Tourists´distribution by country 2007



Source: INE

5. The importance of the Tour Operators

For Torremolinos sources report only about 3 years and regarding the nights spent in hotels there are available the percentages of travellers arriving on the Costa del Sol with an organized package, but they refer to the total demand (official and unofficial offer). Nevertheless, we estimate that Torremolinos is one of the most representative areas of Costa del Sol, so we can extrapolate the data as approximation to the phenomenon.

Table 10: Tourists´ nights spent by Tour Operators category in Torremolinos

Years	Tour Operator	Totals	Percentage of Tour Operator
1999	3348734	5177878	64,67%
2001	3051922	4973106	61,37%
2002	3365585	4847096	69,44%

Source: INE

Table 11: Percentage of tourists coming with a package by Tour Operators on the Costa del Sol

Year	% of tourists with an organized package by TT.OO
1998	29,50%
1999	36%
2000	31,20%
2001	28,50%
2002	27,65%
2003	37,70%
2004	47,71%
2005	45,08%
2006	33,87%
2007	33%

Source: SOPDE

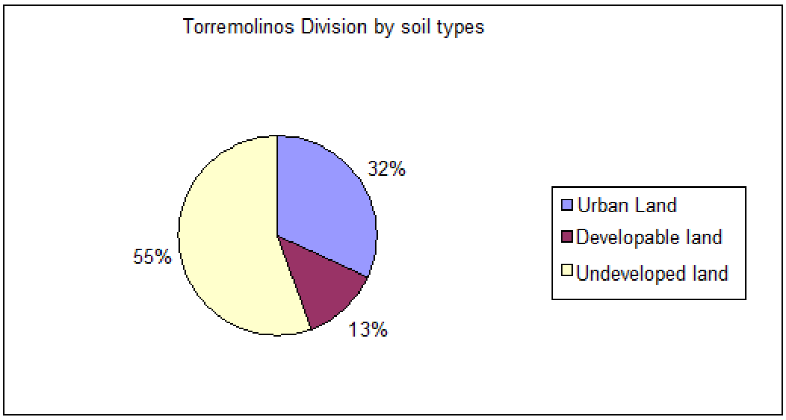
Regarding the nights spent in hotels in Torremolinos realized by Tour Operators, this exceeds 60 % of the total number of nights spent, which supposes that the level of importance of the Tour Operators is high. As for Costa del Sol, between 30 and 50 % of the tourists, depending on the year, turn to Tour Operators, which is a pretty high percentage taking into account the new tendencies of the demand. All this confirm us that the fordist structures continue to be important in the Costa del Sol in general and in Torremolinos in particular.

1.3 Level of land occupation by tourism infrastructure

One way to measure the territorial importance of the tourism is analyzing the urban land (the consolidated area of the town) and the strategic plans for the land development realized by the local administration, the denominated General Urban Town Planning (PGOU).

The municipality of Torremolinos has a 640,3 ha of urban land (32%), 254,3 ha of building land (13%) and 1.158,08 ha represent green belt (55%). At a first glance, one might conclude that there is a lot of land left for development, as 55 % is still green belt; nevertheless, the green belt is mainly constituted by the Mijas mountain range, which, according to our previous analysis, is an unproductive soil because of its limestone structure and the steep slopes. The data provided make us conclude that Torremolinos has few urban lands left, and that not developing it all is a must, required by the territorial sustainability of the area, as not marking out the limits of this development could incur in smaller levels of sustainability.

Figure 15: % Division of Torremolinos land by type



Source: Malaga Urban Town Planning, 2009

As for the typologies of housing occupation, Torremolinos counts with first, second and unoccupied homes, with the former totalling a 52%. This highlights the importance of the second and unoccupied homes in Torremolinos, being one of the characteristics that need to be taken into account when analyzing the tourist phenomenon: the importance of the second home (25 % of the total) points out to the importance of the tourism in this municipality of the Costa del Sol.

Finally, the urban land occupied by the hotel and restaurant industry equals 9%, according to the data of the PGOU of 1996. This percentage, although significant, does not provide us with the real dimension of the tourist activity in Torremolinos. In order to do this, we should also take into account the quantity of the space occupied by apartments, aparthotels and camping, as well as the recreational, congresses infrastructures and other entertainment tourist elements.

Nevertheless, the data of the PGOU of 2008 have not been yet revealed, a fact that has resulted in the impossibility of this investigation team to provide this type of information.

1.4 Attractions, infrastructures, companies and other tourist services

The tourist offer of Torremolinos proposes a series of infrastructures aiming at diversifying the actual demand. The offer can be divided into the following categories: meetings and congresses, sports and beaches infrastructures, tourist attractions and a complementary entertainment offer.

The reunions and congresses infrastructure of Torremolinos sums up to the similar offer of the city of Málaga, and the municipalities of Estepona and Marbella on the Costa del Sol, and Ronda in the interior of the Málaga province. The Costa del Sol Congresses and Exhibitions Centre of Torremolinos, inaugurated in the 70s, is dedicated to fairs, congresses and exhibitions, while the Prince of Asturias Auditorium, one of the biggest in Andalucía, is designed to host different types of events and cultural celebrations.

Torremolinos stands out for its sports offer, which takes into account a variety of sports, especially at a professional level, and which represents a product of high promotional value. This is a well consolidated offer, which can have a definite role in the positioning of Torremolinos as a tourist town compromised with sports.

Additionally to the Sports infrastructures, the Torremolinos Mountains, between the Valley of Guadalhorce and the Mijas Cordillera, represent another option to practice sports and hill walking. The Pine Groves are the most renowned area to do this, with routes of medium and low difficulty.

Table 12: Number of restaurants by category

Year	Restaurants of 5 category	Restaurants of 4 category	Restaurants of 3 category	Restaurants of 2 category	Restaurants of 1 category	Total
1989	1	5	29	135	161	331
1990	1	2	17	97	134	251
1991	0	1	8	78	112	199
1994	0	5	16	102	131	254
1995	0	2	16	101	133	252
1996	0	5	16	104	134	259
1997	0	5	16	105	134	260
1998	0	2	16	103	135	256
1999	0	2	16	103	136	257
2000	0	2	16	105	134	257
2001	0	2	16	105	134	257
2002	0	2	16	105	136	259
2003	0	2	16	105	136	259
2006	0	2	19	106	137	264
2007	0	2	19	108	141	270
Var. 89-2007		-60,00%	-34,48%	-20,00%	-12,42%	-18,43%

Source: IEA, SIMA

Among the tourist main attractions of Torremolinos, La Carihuela and El Calvario, typical neighbourhoods and samples of popular architecture, are the most renowned, together with the San Miguel Street, a central point of the town, an important commercial and restaurants area. Torremolinos also counts with samples of religious architecture, the San Miguel Archangel Chapel being the most significant, and a meeting place during the San Miguel Pilgrimage, which proceeds the local holidays.

Regardless of all the above mentioned, the main attraction of Torremolinos is represented by its beaches: La Carihuela, El Bajondillo, Playamar, Los Álamos, El Saltillo. The access is easy, and can be done either by foot of by car, as most of them have parking.

Other complementary services, like the Aqualand and the Crocodile Park, complete the entertainment offer of Torremolinos and the infrastructures mentioned above. Torremolinos has a high number of festivals (Rockin Race etc.), religious celebrations (Holy Week, Crosses of May etc.), local thematic holidays (Tourist´s Day etc.), gastronomic celebrations (Día del Pescaito) and fairs.

It is also interesting to see the evolution of the number of restaurants in Torremolinos. As shown in the figure below, restaurant supply has not been greatly benefited during the years 1989 to 2007, since it fell by 18% from 331 to 270 restaurants. Unlike the accommodation offer, higher category restaurants suffer a decline even more serious than the other categories (-60%), so that we are facing a great effort in increasing the quality and level of hotels, but nevertheless, this increase in quality of hotels is not being reflected in other indicators of the destination.

2. Status and performance of tourism in Torremolinos

Once having exposed *the driving forces* that have been developed in the tourism system, we continue quantifying the *status* and *performance* of tourism in the municipality of Torremolinos from all three sides of sustainability: economic, social and environmental.

2.1 Economic Dimension

It is estimated that total tourism revenues for 2009 may reach approximately 446 million Euros[4]. It is estimated that the figure is consistent when compared with a previous study stating that in 2003 Torremolinos tourist activity generated 522 million Euros. The study by the tourist EXCELTUR lobby makes an average between the impacts on the environment, economy and employment of the various models of tourism development in the Spanish Mediterranean coast, the Balearic and Canary Islands. The figures for 2009 are lower than in 2003, and this is part of the decrease trend in revenue that Torremolinos has been experiencing since 2008, although announced by various indicators of early 2000 (Pocket tourist spending in the Costa del Sol, decreased length of stay, and variations on the number of passengers, etc.).

As detailed below this decline is to be linked to a decrease in profitability in the tourism sector in the Costa del Sol and is based on the assumption that a destination that reaches an advanced level of maturity cannot be based on a growth strategy of supply and demand (as has happened in Torremolinos and the Costa del Sol), but must seek new strategies of qualification, higher quality of the supply and demand.

Table 13: Housing revenues

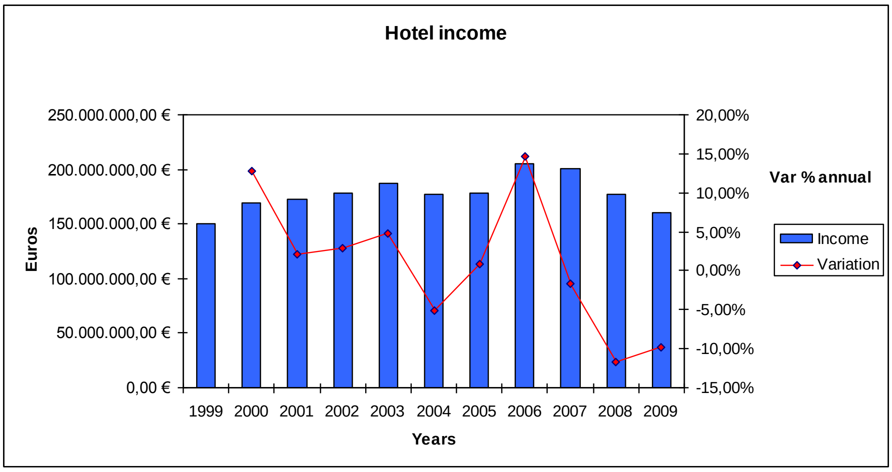
Year 2008	Nº overnight stays	Average day Price double room	Revenues
January	205.745	65,54 €	6.742.451,94 €
February	255.037	65,20 €	8.314.355,29 €
March	351.129	66,31 €	11.641.140,69 €
April	372.947	69,29 €	12.921.565,03 €
May	443.285	68,86 €	15.262.227,42 €
June	463.296	76,94 €	17.822.616,88 €
July	553.240	97,12 €	26.864.185,86 €
August	568.361	100,69 €	28.613.063,38 €
September	477.200	89,71 €	21.405.994,89 €
October	384.758	77,43 €	14.896.338,72 €
November	211.920	69,19 €	7.331.876,14 €
December	170.842	67,70 €	5.782.892,88 €
Total	4.457.759	79,68 €	177.598.709,12 €

Source: Own elaboration, data Source: INE and IEA

[4] Total tourism product is calculated taking into account the average pocket spending (32,18 €) plus the average hotel spending (38,46 €), which totals 294 million. To this, we must add the spending for endorsed apartments of 60 million and the unendorsed accommodation of 92 million.

The most cost-effective accommodations type which provide increased income for Torremolinos is the hotel sector, which generates 65% of all tourism revenues, compared with 20% contributed by the non-formal supply (excluding spending on housing difficult to estimate) and about 15% provided by the apartments.

Graphic 16: Evolution of revenues



Source: Own elaboration. INE & IEA.

Table 13: Hotel Revenues

Year	Hotel revenues	Nº seats	Value per seat	Overnight stays	Average Price	Travellers	Average stay
1999	150.169.644,49 €	15.018	9.999,31 €	5.177.878	29,00 €	935.653	5,53
2000	169.416.168,24 €	15.687	10.799,78 €	5.330.346	31,78 €	972.833	5,48
2001	173.062.897,65 €	15.687	11.032,25 €	4.973.106	34,80 €	892.388	5,57
2002	178.154.255,62 €	15.580	11.434,80 €	4.847.096	36,75 €	924.144	5,24
2003	186.706.133,26 €	16.164	11.550,74 €	4.915.604	37,98 €	867.815	5,66
2004	177.157.336,86 €	17.797	9.954,34 €	4.580.677	38,67 €	926.705	4,94
2005	178.541.956,98 €	17.797	10.032,14 €	4.470.801	39,94 €	910.636	4,91
2006	204.690.323,76 €	17.759	11.526,01 €	5.107.521	40,08 €	1.161.512	4,4
2007	201.146.851,59 €	17.012	11.823,82 €	4.916.305	40,91 €	1.173.499	4,19
2008	177.598.709,12 €	17.040	10.422,46 €	4.457.759	39,84 €	1.007.299	4,43
2009 *	160.186.873,13 €	17.445	9.182,39 €	4.164.632	38,46 €	..	..
Var 99-08	6,67%	16,16%	-8,17%	-19,57%	32,63%	7,66%	-19,89%

Source: Own elaboration. INE & IEA

In 2008[5], hotel revenues reached 177 million€[6], which represented a significant decrease (-11.71%) compared to 2007. Seasonality is a characteristic that greatly influences the economic performance of tourism and although occupation rates, as discussed in the previous report, presented a moderate seasonality, the activity is highly concentrated in the summer months. The consequence is that between July, August and September almost 50% of revenues are accumulated, which is equivalent to 75 million € compared to 177 M € during the whole year. The

[5] Some of the data from 2009 have not been published yet.

[6] The general spending realized by hotel tourists is calculated based on the number of nights spent and the index of prices offered by INE, IEA and the survey realized for this study in Torremolinos and which is further called EHPB. The methodology of this consists of multiplying the annual number of nights spent in Torremolinos (data from INE) by half of the average daily price of a double room (Hotels Occupation Survey in Andalucía) and its value updated through the consumption variation indices (INE).

cause of seasonality is "sun and beach" product predominant in Torremolinos. In the winter months the occupancy levels are maintained through immersion travels and journeys made by retirees from around Europe, who can enjoy the offer almost half the price, other school holidays such as Easter and Christmas and the existence of other minor but interesting products such as meetings and incentives tourism, sports tourism or international events.

The evolution of hotel revenues in the last decade is of high interest because it highlights a medium-term trend and suppresses the circumstances. The evolution over the last decade, between 1999-2009, has been positive as revenues increased by 6.67%, with some major changes; for example, very good years like the year 2000 with an increase of 12.8% and 2006 (14.65%), and less positive data like 2004, which registered a decrease of 5.1%, 2007 (1.7%), 2008 (11.7%) and 2009 (9.8%). This marks a trend in the last three years involving a total decrease of 23.2%.

These absolute positive data must be analyzed with greater depth and will demonstrate the hypothesis that we stated at the beginning of this report, about the growth of mature destinations, the errors of Butler´s model, and will make us understand better the economic reality behind these figures. Firstly, the evolution of hotel revenues reveals that the year with a major hotel income is 2006 with 204 M €, due to the higher number of travellers (1,161,512) and more overnight stays (4,470,801); however, the average length of stay decreases with 0.5 days. Nevertheless, the most profitable year in terms of tourist beds is 2007 (11.823 € / bed), due to the decrease in the number of seats (700 seats compared to the year 2006), and especially so because the reduction of seats is given in hotels of 3, 2 and 1 star, which are of lower quality, as stated above.

Table 14: Hotel revenues at constant prices in 2006

Constant Price 2006						
	Hotel revenues	**Var %**	**Profitability per sert**	**Var %**	**Average prices**	**Var %**
2002	202.448.017,75 €		12.994,09 €		41,76 €	
2003	205.850.202,05 €	1,68%	12.735,10 €	-1,99%	41,87 €	0,27%
2004	189.473.087,55 €	-7,96%	10.646,35 €	-16,40%	41,36 €	-1,23%
2005	184.826.042,42 €	-2,45%	10.385,24 €	-2,45%	41,35 €	-0,03%
2006	204.690.323,76 €	10,75%	11.526,01 €	10,98%	40,08 €	-3,06%
2007	195.668.143,57 €	-4,41%	11.501,77 €	-0,21%	39,80 €	-0,71%
2008	165.980.101,98 €	-15,17%	9.740,62 €	-15,31%	37,23 €	-6,44%
2009	150.128.278,47 €	-9,55%	8.605,80 €	-11,65%	36,04 €	-3,19%
Var Total 02-09		-25,84%		-33,77%		-13,69%

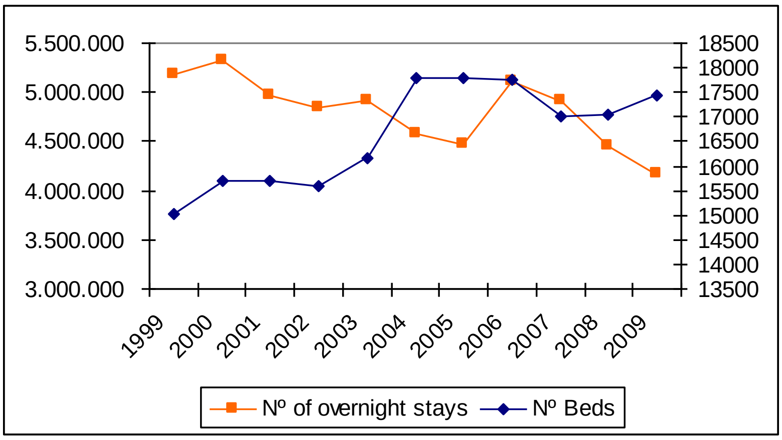
Source: Own elaboration. INE & IEA

A second point is the general evolution of revenue per bed. In this case, there is a clear decline in 2004, 2008 and 2009 and these last two years register an important loss of much of the gains during 2006 and 2007. This ranges from € 11,823 / bed in 2007 to € 9,182 in 2009; this way, the evolution from 1999 to 2009 represents a decrease of 8% in revenue per bed. The main cause of this loss of profitability can be explained by the reduction of the average stay that has fallen by nearly 20% and the reduction of the room price in these last two years, a strategy used to maintain the number of visitors but of low effectiveness to maintain and increase overnight stays.

The third important factor is to calculate hotel revenues per constant year (at the rate of 2002 constant prices); the profitability per seat (per unit of production) decreased significantly to 33.7% and the average price per bed fall by 13.7%. This decrease in profitability contrasts with the overall increase in the number of hotel beds, which does not answer to an increase in the demand, but which inexplicably continues to grow almost as fast as the decrease in the number of overnight stays; this is why in 2009 the average return per bed equals the level at the beginning of the XX century.

The interpretation of Table 14 may offer us the key and **provide us the answer for the loss of profitability** and economic sustainability of the tourism model implanted in Torremolinos. How have hotel revenue decreased by 25%, after the great increase in the quality and supply (particularly in relation to the category and number of hotels)?

Graphic 17: Evolution of overnight stays and hotel beds



Source: Own elaboration. INE & IEA

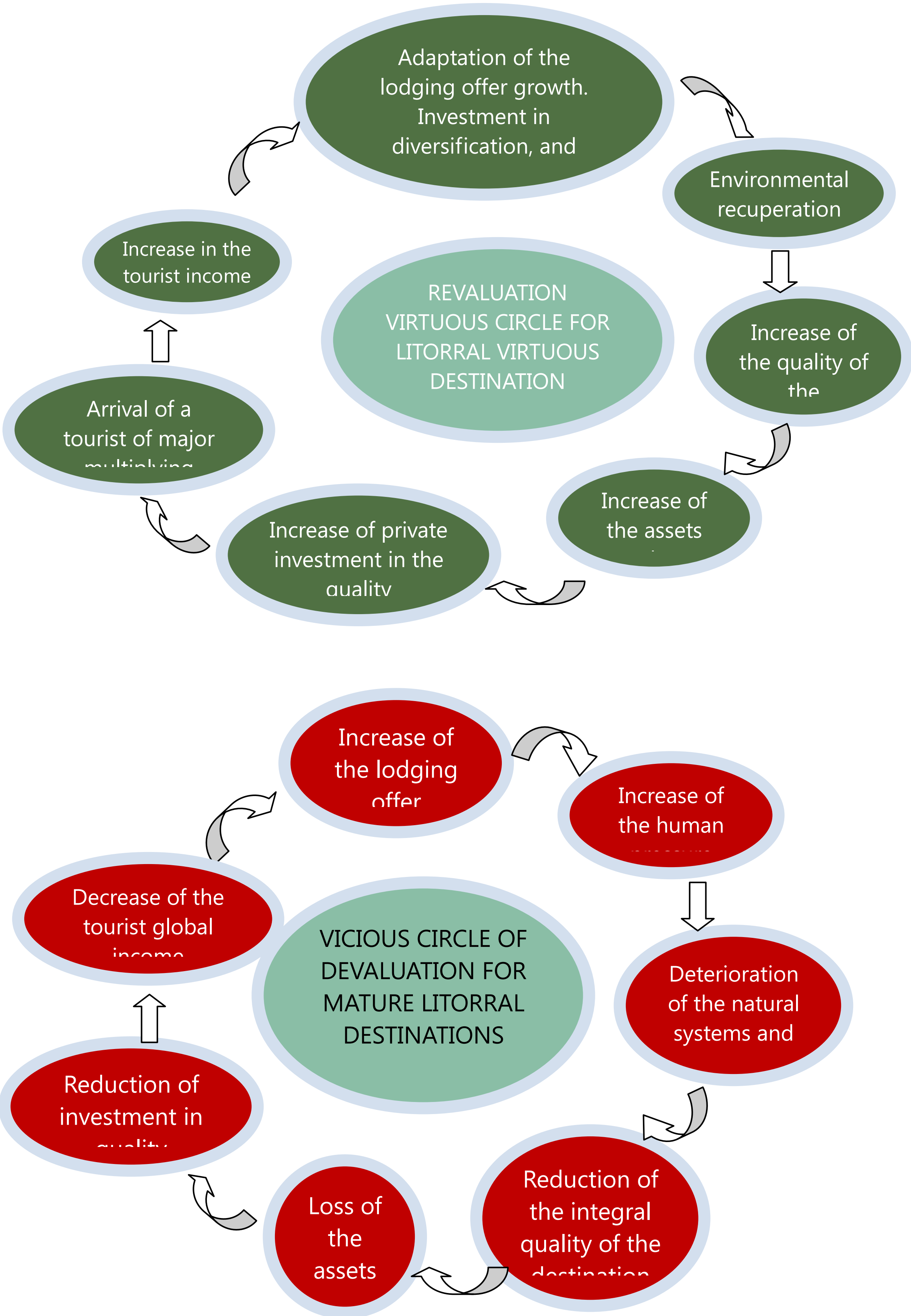
Graphic 18: Evolution of average price and number of days spent (1999-08)

Source: Own elaboration. INE & IEA

Although there have been several factors that have led to this decline in profitability, the main factor has been the reduction in price (at constant prices). The hotel prices declined from €41.76 in 2002 to 36.04 in 2009, assuming a fall of 13.7%. If we add to this the decline in recent years of the number of passengers with a loss from 2002 to 2009 of 5% and especially the decrease in the average length of stay of almost 9%, we find the answer to the decline in profitability of the destination.

Unfortunately, the measures to increase quality for justifying the price increase have not been satisfactory, as they mainly focused on increasing the quality, or rather the category of the hotels, without giving equal importance to the environment and the territory. At the same time supply has increased in an uncontrolled manner, for both economic and environmental sustainability of the destination, encouraging even further the price decrease and the declining profitability of a hotel bed.

Figure 19: Virtuous and vicious circles of matures destinations



Source: Own elaboration. EXCELTUR, 2004

One would think that with the current economic crisis these figures are normal and cyclical, but we must remember that until 2008 there was no crisis effect, and that this decline in profitability on the Costa del Sol is being estimated since 2002, as shown by the diagnosis of Qualifica Plan. We tend to think of stagnation and of the beginning of the decline of a tourism model that seeks only growth and expansion, because these events can impact first on the quality of the facilities and then on the destination, entering the so-called "vicious circle of devaluation of mature destinations."

A very important aspect to consider when studying hotel revenues and especially their prices is the elasticity[7] of demand for hotels. In this case we can rather speak of the inelasticity of the demand, especially with regard to the number of travellers, as it doesn't even have a positive or negative constant value to changes in prices, not being able to express a direct relationship between prices and the number of travellers. We can establish a certain relationship with respect to the average number of days, as with the annual increase in prices during the period 1999-2008, the average length of stay has gradually decreased. This shows that market price mechanisms do not always work according to elasticity of the demand, because the tourism industry is more complex and there are other elements to consider.

Table 15: Elasticity of the Demand

Year	Elasticity Travellers/Price	Elasticity Overnight stays/Price	Elasticity Average Length of stay/Price
1999			
2000	0,41	0,31	-0,10
2001	-0,87	-0,71	0,18
2002	0,63	-0,45	-1,05
2003	-1,83	0,42	2,39
2004	3,72	-3,74	-6,98
2005	-0,53	-0,74	-0,21
2006	77,95	40,30	-29,52
2007	0,49	-1,79	-2,26
2008	5,40	3,55	-2,15

Source: Own elaboration

One of the key data *status* indicators is the tourist spending. For this analysis, data have been compiled from the Tourism Observatory of Costa del Sol concerning the average daily spending of Torremolinos in 2009 and also data collected from the Costa del Sol since 2001 in order to have them as reference.

Average pocket spending per day in Torremolinos is of 32.18 € in 2009, which, together with the average spending per accommodation (€ 38.64) gives an average income in 2009 estimated at 294 million Euros; this figure is probably much lower than in previous years such as 2006 and 2007, as it presents major occupation rates and significantly higher prices. We have no data about Torremolinos in the previous years but if we compare the study area with the Costa del Sol a declining variable reappears during the period 2002 to 2008, passing from 45 € / day in 2002 to € 35.2 / day in 2008 (2002 prices) thus reducing by 21%. Importantly, Torremolinos has a type of tourist spending less in the destination, and this is understandable, being an area that attracts a less affluent tourist, compared with other cities on the Costa del Sol and Marbella (30-60 € daily

[7] The demand-price elasticity or simply put, demand elasticity, measures the relative or percentage variation experienced by the demanded quantity as a consequence of a variation in the price of 1 %; in other words, it measures the intensity with which the buyers respond to a price variation.

expenditure by 41% of the tourists and € 18-30 with 29.3%) of Málaga capital (38.5% of € 30-60 and 33.3% of 18 - 30€) or Fuengirola (29.4% of 30-60 € expenditure and 29.4% of 18-30 €).

Regarding the distribution of this pocket expenditure in Torremolinos in 2009, the major consumption is registered for meals in bars and restaurants (62%), followed by 12% in non-food purchases and 7% on food and entertainment purchases. This distribution of spending involves an abundance of commercial services and therefore Torremolinos is one of the municipalities with the highest number of shops by residents in the province of Malaga, with 28 shops per thousand inhabitants, compared to 21 in the whole province, or 8.7 supermarkets per 10,000 inhabitants, compared with 6.6 in the province of Malaga.

Table 16: Average daily spending in Costa del Sol and Torremolinos

	Costa del Sol, average daily spending distribution %								**Spending Distribution % Torremolinos 2009**
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	
Less than 18 Euros	28,61	23,30	26,10	19,24	18,82	21,69	29,30	25,20	19,28
From 18 to 30 Euros	15,66	21,44	22,39	24,32	20,53	22,96	22,10	32,70	45,98
From 30 to 60 Euros	37,03	34,75	30,24	37,20	48,78	41,96	33,60	32,10	28,92
More than 60 Euros	14,73	15,38	13,38	19,23	11,86	13,39	15,00	10,00	5,82
Average Price	37,32	39,60	35,80	34,56	37,17	36,51	39,94	37,66	32,18
Price M (2006 price rate)	44,11	45,00	39,47	36,96	38,48	36,51	38,85	35,20	30,16
Annual variation		2,03%	-12,29%	-6,35%	4,10%	-5,12%	6,42%	-9,41%	

Source: Own elaboration, data from the Tourism Observatory of Costa del Sol

It is interesting to show specific data of the demand[8] as this will facilitate the understanding of the low tourist spending in Torremolinos. The preferred *type of travel* is for holiday / leisure purposes (92%), and the main *motivation* is the weather (50.3%) and the beaches (48.6%) with a tendency to *passive activities*: going to the beach and doing classic sports or games such as swimming, beach volleyball ... (70.8%), walking (55.9%); we are talking about a profile of familiar age (18% between 30-39 years and 25% between 50-59 years).

Another interesting fact in the Bleu Plan Hotel Survey (BPHS) is that the applicable regime in hotels is mainly for "accommodation only" (38%), although with great differences between the various categories; for pensions and 1 and 2 stars hotels the predominant regime is "accommodation only", while 3 and 4 stars hotels present a wider variety: 5% of visitors prefer "accommodation only", compared with 36% choosing "bed and breakfast, 37% of "half-board" and 22% who opt for "full board". It is very positive for the destination to have few "all inclusive" hotels as they pose a greater concentration of income with greater potential for economic leakage; however, part of the interviewed hotel managers (BPHS) reveal an increase in "full board" demand and tour operators are promoting and sometimes "demanding" an increase in the supply of "all inclusive" in the Costa del Sol, and the region wants to maintain a percentage of tourists funnelled by these TT.OO[9]. The effects of this type of offer are very dangerous in mature destinations, as they could cause a lot of damage to the traditional hotel offer and especially to those not linked to major hotels chains (55%) and seriously affect the complementary offer (restaurants, bars...).

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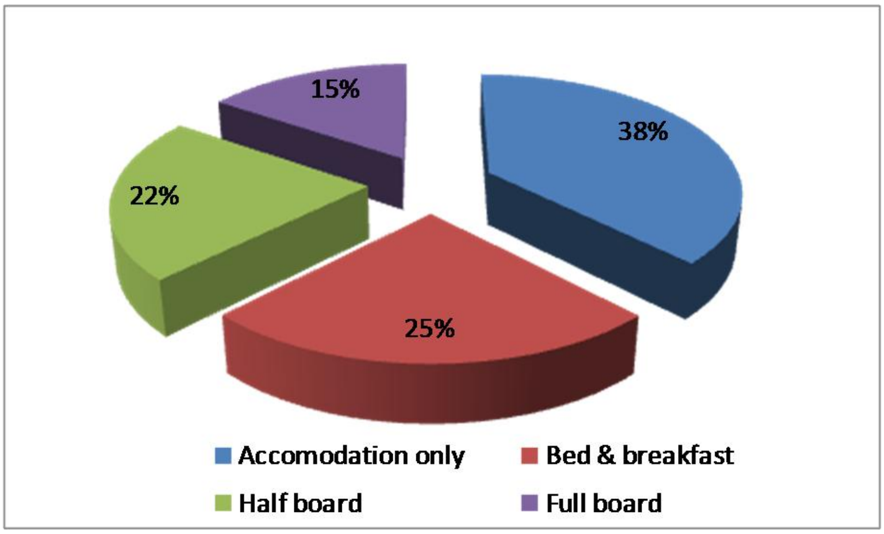
8 These data have been compiled after the first report

9 Declarations by Manuel Butler, director of the Spanish Tourism Office in Berlin, made during the conferences "El turismo: una industria por pulir?" celebrated on 16.04.2010.

Despite the importance of hotel tourism, we would also stress other types of tourist revenues. It is estimated that the regulated apartments offer reach 1,024,919 overnight stays, accounting for approximately 60 million €. More difficult to estimate is the unregulated supply, taking into account the number of beds estimated at 48.120 and considering an average stay of 60 days[10] (Exceltur); this type of accommodation would have provided an income of € 92 million Euros.

The analysis realized so far has only considered the impact derived from the tourists´ direct spending during their stay; however, there is a second level of multiplier effects on other economic sectors present in the destination or subject to its influence that represent the total multiplier capacity generated by the tourism activities altogether and which will be commented later in the report.

Graphic 20: Type of housing in Torremolinos



Sources: Own elaboration, using BPHS 2010 data

2.2 Social Dimension

The *status* social indicators are primarily focused on the employment and unemployment both directly and indirectly. Except for certain types of jobs, the employment generated by tourism is not too qualified, however, despite the increase in university studies in tourism and special training centres, Spain is characterized by low wages in tourism employment, which decreases possibilities of making it more economically attractive and may affect the quality of services (Exceltur, 2006).

Undoubtedly, tourism is the sector that more jobs generates directly and indirectly, and it is believed to generate between 65-70% of all employment in Torremolinos. This dependence on tourist flows is negative in what concerns the sustainability of the destinations, due to the vulnerability involved, especially in a volatile sector highly influenced by exogenous factors (economic crisis of issuing countries, terrorism, natural disasters, and competition from other destinations ...).

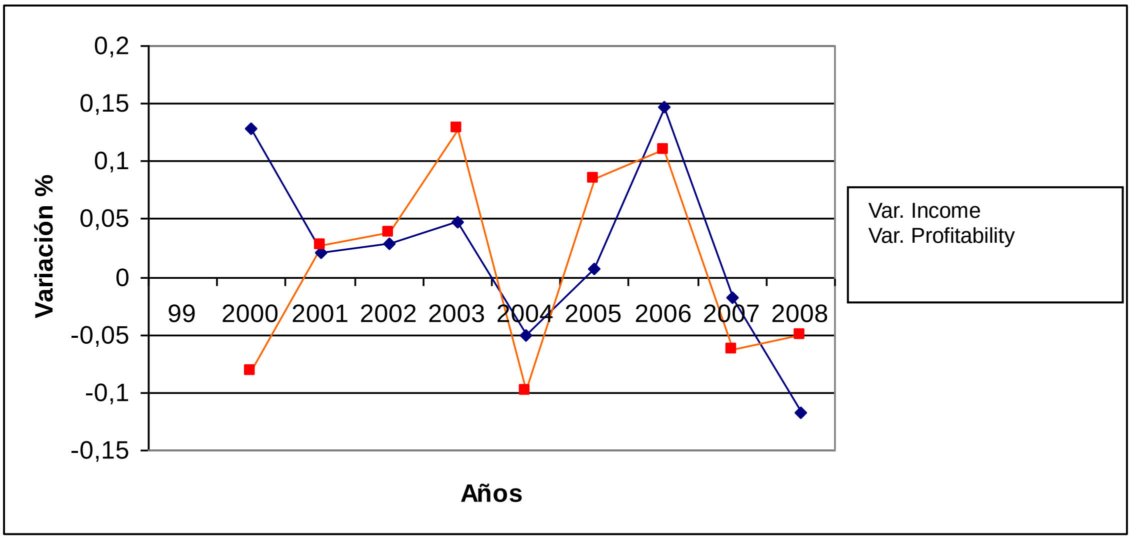
[10] According to data estimated by Exceltur, Tourism Impacts 2005.

Table 17: Total employment in hotels and generated profitability

Year	Revenues	Nº Months	Profitability/ Months	Average Nº of workers	Var. Workers	Profitability/ Workers
1999	150.169.644,49 €	48.492	3.096,79 €	2.148		69.924,94 €
2000	169.416.168,24 €	58.599	2.891,11 €	2.640	22,92%	64.174,82 €
2001	173.062.897,65 €	58.226	2.972,26 €	2.626	-0,52%	65.901,53 €
2002	178.154.255,62 €	57.855	3.079,32 €	2.605	-0,82%	68.402,48 €
2003	186.706.133,26 €	54.739	3.410,84 €	2.420	-7,09%	77.159,27 €
2004	177.157.336,86 €	56.543	3.133,14 €	2.548	5,31%	69.518,90 €
2005	178.541.956,98 €	53.207	3.355,61 €	2.366	-7,16%	75.461,52 €
2006	204.690.323,76 €	54.812	3.734,41 €	2.444	3,31%	83.743,61 €
2007	201.146.851,59 €	57.487	3.499,00 €	2.564	4,89%	78.458,06 €
2008	177.598.709,12 €	53.315	3.331,12 €	2.385	-6,98%	74.472,67 €
Var 08-99	18,27%	9,95%	7,57%	11,04%		6,50%

Source: INE 1999 to 2008

Graphic 21: Evolution of revenues variation of profitability/worker.



Source: Own elaboration. Data compiled from INE 1999-2008

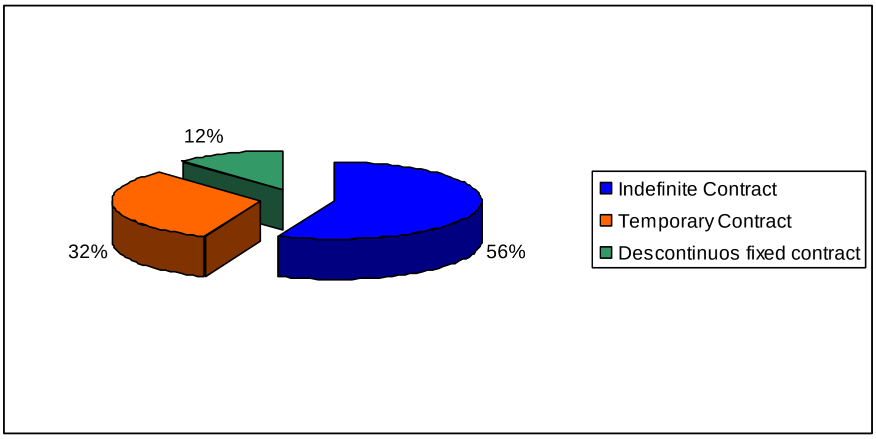
With regard to direct labour, during the study period, 2000 was the year when most jobs were created with 58,599 months contracted, being the less seasonal year (remember the variation coefficient in 2000, of only 1, 14). However, this year does not coincide with the year of major revenues (2006).

The profitability of workers is an interesting fact: in the last ten years, a hotel worker in Torremolinos has been generating around € 72,721, with significant annual variations. In 2005 the significant increase in profitability per employee (8.5%) stands out, as well as the fact that revenues hardly increase (0.78%); there are different factors that explain these variations, such as increases in productivity, thanks to softer seasonality, or even, in most of the cases, the restructuring by closing and opening of hotels that need some time dedicated to training its staff.

Graphic 22: Employment evolution in Hotels

Source: Own elaboration. Data INE 1999-2008

Graphic 23. Types de Contracts



Source: Hotel Survey, Blue Plan, March 2010

The seasonality of the employment is a feature that affects the quality of work; the average direct hotel employment is of 2,500 workers in 2008, with significant variations between the low and high season months, for example, from 1661 workers employed in December to 3079 in August (77% difference). This seasonality is reflected in the types of contracts: from the 30 employees on average in the hotels of Torremolinos in 2010, only 56% (according to BPHS) are employed indefinitely, 32% on a temporary basis and 12% of indefinite time. A positive fact is the significant number of permanent contracts in 2010 (68%), and whose evolution since 1999 has been positive, with minor variations, but positive, as shown in table No. 18; the causes of this evolution are the recent labour reforms that have offered great flexibility to the labour market in Spain. This data ensures a level of professionalism in a sector with a high degree of seasonality and historical staff turnover, because a stable staff are more experienced and have an impact on the quality of service.

The low level of qualification of the workers in the tourism sector is reflected in the training of the employees. In 2010, the predominant educational level is represented by secondary studies (baccalaureate and vocational training) with 54% of the workers, followed by basic studies (33%) and, with a smaller representation, workers with university studies (12%) and postgraduate studies (1%).

Table 18: Types of Contracts

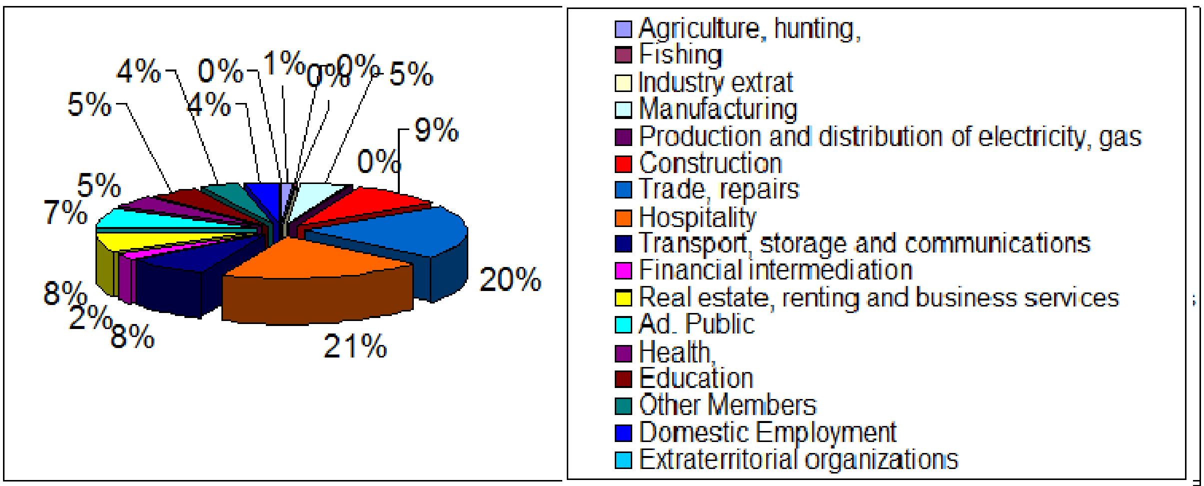
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Torremolinos 2009 BPHS
Not paid	3,20%	2,10%	2,60%	3,00%	2,40%	2,87%	2,75%	2,95%	1,76%	1,52%	..
Paid	96,80%	97,90%	97,40%	97,00%	97,60%	97,13%	97,25%	97,05%	98,24%	98,48%	..
Permanent Employment	57,70%	60,40%	62,00%	63,40%	66,10%	69,31%	67,01%	66,21%	67,88%	69,83%	68,00%
Eventual	39,10%	37,50%	35,40%	33,60%	31,50%	27,82%	30,24%	30,83%	30,36%	28,65%	32,00%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100,00%

Source: Own elaboration. Blue Plan Hotel Survey, March 2010

As discussed, the location of the study area concedes unique characteristics to the tourist resort of Torremolinos, as being connected with other close resorts. The proximity to Malaga capital and to a tourist conurbation of nearly 150km of length (Costa del Sol) supposes that over 61% of hotel workers reside outside Torremolinos, the majority of them men (68.2%), well above the percentage of women; on the other side, among the workers resident in Torremolinos, those under 25 years constitute the majority (42 %). Another interesting aspect is that Torremolinos is a type of dormitory town to Malaga capital, although in most of the cases workers come from other sectors, which would compensate the drain of wages (wealth) to other locations.

Equally interesting as the direct employment is the indirect employment and in the case of Torremolinos the activities related to tourism flows are of great importance. As shown above, much of the secondary employment and services depend on tourism activities (shops, real estate, construction ...), which can reach between 65-70% of the direct and indirect employment. The available data on economic sectors come from the population census of 2001 and although a little old, it draws us closer to the reality. In the distribution of employment, the hotel business accounts for 21%, while sectors such as trade related (20%), transport (8%), construction (9%) and real estate (8%) - of which second home and residential tourism depend – total 45% of jobs.

Graphic 24: Employment distribution per Economic Sectors



Source: IEA, 2001 Census

The next social *status* indicator is unemployment, an endemic evil of enormous socioeconomic impact. Spain is characterized by high unemployment rates with respect to the European countries because its production structures have been unable to absorb the potential of workers.

As the hotel business is the largest employer in Torremolinos, it is also the main unemployment creator, especially in recent years; this way, the unemployment rate concerning the population has increased from 6.9% in 1999 to 9.6 in 2008, with an increase of more than 2.7%. While this growth is important, a greater problem posed for the socioeconomics of the area is the dramatic growth of unemployment in the construction sector, and those associated with it, such as real estate activities; some data quantify these statements, the potential workforce grows by 63% between 1999-2008, while the number of unemployed grows more in hotel business (96%), construction (365%) and real estate (263%). These data come to stress once again the loss of income and profitability of the tourism industry during 1999 to 2008.

Table 19: Unemployment per sector referencing the potential workforce

Year	Sector 1º Agric. Fish. Ind, Extra	Construction	Commerce and repairing	Hotel business	Transportation Storage	Real estate activities	Publ Admin, Education, Health, Domestic work	Nº of unemployed: without previous employment	Total Unemployment	Potential Workforce (15-64)	% Unemployed / P.p.a.
1999	172	110	266	462	84	247	268	316	1.925	27.701	6,95%
2000	157	103	251	425	76	235	269	308	1.824	29.462	6,19%
2001	97	111	262	455	63	249	246	296	1.779	31.243	5,69%
2002	90	122	263	427	55	245	251	278	1.731	33.426	5,18%
2003	87	136	264	418	59	240	253	272	1.729	36.229	4,77%
2004	84	152	285	416	70	268	289	245	1.809	37.589	4,81%
2005	92	215	464	657	122	426	402	422	2.800	39.938	7,01%
2006	99	235	497	717	120	488	406	566	3.128	42.233	7,41%
2007	120	311	497	734	124	658	420	538	3.402	42.957	7,92%
2008	144	512	625	907	159	898	486	598	4.329	45.160	9,59%

Source: IEA 99-08

From 2000 to 2008, job losses in the hotel sector is estimated at about 244 jobs, while unemployment created in this period is of 482 job losses, in which about half corresponds to the hotel business excluding hotels, therefore, making reference to Hostels, Houses, Guest Houses, Apartments and Restaurants.

The characteristics of the unemployed by gender and educational level also show the weakest strata of society with respect to work and how the less qualified jobs are the most unstable. This fact reinforces the conclusion on the low qualification of jobs in tourism. In 2008 the largest number of unemployed is registered in the category of the workers with secondary studies, especially women.

Basically, in Torremolinos the direct and indirect tourism employment is predominant, attracts a young and potentially active population (compared to other territories - Province, Spain), a higher unemployment rate than in Spain but lower than in Malaga Province and a lower percentage of Social Security affiliation, which is interpreted as an undeclared employment and an outstanding important black economy (economic leakages); in these figures we must take into account the large amount of the non-formal housing supply and the high number of companies that declare to the Tax Office an economic activity lower than the real one. This is the first data to analyze the impact of tourism and sustainability.

Table 20. Potential workforce and unemployment in Torremolinos, Málaga and Spain

	Torremolinos	Province	Spain
Population between 15 to 64 (1/1/2008)	45.160	1.090.470	31.851.946
% Pop. 15-64/ Pop. Total	71,60%	69,08%	69,01%
Contributors to Social Secutiry	17.869	428.757	18.305.613
% of Pop. Between 15-64	39,57%	39,31%	57,47%
Unemployment rate 31/3/2009	6.225	154.947	3.605.402
% Unemployment / Pop. 15-64	13,78%	14,21%	11,32%

Source: Caja España 2009

2.3 Environmental Dimension

2.3.1 Resources Consumption: Water and Energy

The available data on **water** are scarce at the local level because the collection and management of this resource involves several municipalities (Costa del Sol). This problem gets more complex when referred to the tourism sector because the shortage of water is a "political" and often very contentious topic.

In 1999, Torremolinos registered a consumption of 12,211,444 m3/year, with a significant difference between winter and summer. During the winter months the average consumption is estimated in 7624 m3 per day and in summer it amounts to 10.892 m3/day, representing an average increase of 42% during high season compared to low season. This consumption does not register illegal wells (not registered and therefore presenting an uncontrolled consumption and no taxes) due to the fact that an extensive area of Torremolinos sits above an aquifer (subterranean water).

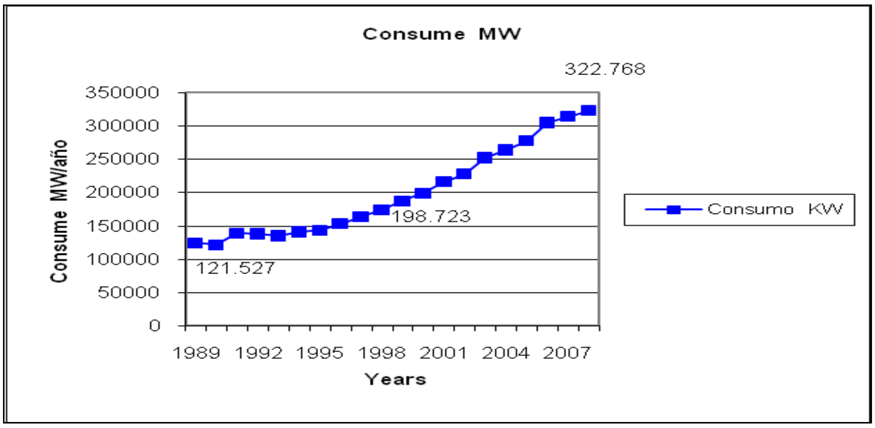
With regard to water consumption in hotels, it has been impossible for the respondents to declare the water consumption levels (BPHS), with only two hotels having provided us this information; this makes it impossible to estimate the average consumption by hotel category. According to the limited data provided and the interviews to municipality officers we can conclude that water consumption in hotels can represent about 30% of water consumption across the municipality. We must add to this the water consumption of one of Europe's largest water parks "Aquapark Torremolinos" and the recreational complex "Crocodile Park", although of less importance.

Another interesting aspect is that only 3.7% of the hotels have their own well for garden irrigation and no hotel that has taken the survey has a water reuse system.

Studies made in the area (Marchena, 1987) and other similar areas (Vera, 2006) have quantified that a five star hotel can reach an average consumption of 500 litres / square / day, compared to a two stars hotel that reaches only 200 litres / square / day, which show the high level of consumption of these tourism businesses.

Another status indicator is the **energetic consumption**. The electricity consumption shows an important increase during the last decades, passing from 124.139 megawatt/hour in 1989 to 322.769 megawatt/hour in 2008, which supposes an increase of 160%. The per capita consumption in Torremolinos is of 5,2 megawatt/hour/year.. However there are municipalities with greater electric power consumption such as Marbella with 8 megawatt-hours per year, Mijas and Benalmadena with 6 megawatt hours per year.

Graphic 26: Energy consumption



Source: Own elaboration

Another interesting aspect is the distribution of energy consumption by sector. Trade and services are the most energy-intensive activities, namely 49.5% (159 992 megawatt/hour in 2008), followed by the residential sector (39.7%) and far behind by the rest of economic sectors, public administration and utilities (9%), industry (0.6%) and agriculture (0.01%).

It is important to highlight the diversification of energy consumption in hotels, due to the use of different energy sources. A recent survey of hotel managers (AHECOS, 2009) reports that electricity consumption in hotels on the Costa del Sol represents 54% of consumption, the remaining 46% being provided by thermal energy.

Table 21: Relation between consumption of MWh overnight stays, and tourist income

Years	Number of overnight stays	Income	Total MWh Services	MWh/1.000 Overnight stays	MWh/10.000 €
2000	5.330.346	169.416.168,24 €	86.505	16,23	5,11
2001	4.973.106	173.062.897,65 €	117.377	23,6	6,78
2002	4.847.096	178.154.255,62 €	120.286	24,82	6,75
2003	4.915.604	186.706.133,26 €	134.838	27,43	7,22
2004	4.580.677	177.157.336,86 €	136.165	29,73	7,69
2005	4.470.801	178.541.956,98 €	139.327	31,16	7,8
2006	5.107.521	204.690.323,76 €	150.619	29,49	7,36
2007	4.916.305	201.146.851,59 €	156.411	31,81	7,78
2008	4.457.759	177.598.709,12 €	159.992	35,89	9,01
Var 00-08	-16,37%	4,83%	84,95%	121,13%	76,32%

Source: IEA, own elaboration

The thermal energy is used for heating, running water, sanitary, heating of swimming pools and kitchen, and among the fuels used there is the diesel (33%), natural gas (22%) and propane (45%). The high consumption of these heating sources is mainly due to the low economic costs, because although accounting for 46% of the energy consumed in hotels, the corresponding economic cost is of only 27%.

Regarding the use of solar energy, a dozen hotels in Torremolinos use this type of energy, a figure that will increase mainly due to the "Technical Building Code," which imposes the use of this renewable energy for domestic hot water demand and the heating of indoor pools through special caption, storage and use systems. This requirement applies to all buildings, and hotel managers have been pioneers in incorporating solar energy with 45% of hotels in the Costa del Sol already having it installed.

The main factor when comparing the services sector energy consumption with the number of overnight stays and the income is the exponential growth in energy consumption since 2000. It decreases the energy efficiency year by year, becoming an increasingly unsustainable system that is increasing the Mw / h in the service sector consumed per unit produced.

2.3.2 Acoustic contamination

Regarding the sources of acoustic contamination, 80 % of the complaints are caused by Entertainment locals, especially bars with terraces and problems related to cooling engines and air conditioning. According to information provided by Torremolinos city hall[11], a great effort has been put in recent years in prevention actions, being these very complex and controlling the opening licenses of the locals, thus maintaining the number of complaints at very low figures (less than 30 in the last five years).

Table 22. Level of noise in municipalities with over 10.000 inhabitants, Torremolinos, 2007

	LEQ24H	LEQ-d	LED-n	LDN	L10-24h.	L10-d	L10-n	L10-nL90-24-d	L90-d	L90-n
Torremolinos	65,8	67,1	60,5	69,4	68,1	69,4	63,1	49,7	57,2	45,7
Fuengirola	65,3	66,6	60,2	69	67,7	68,7	62	46	57,8	41,2
Lucena	67,1	68	62,7	71,2	69,7	70,5	64,9	39,6	54	36
Ubeda	65,8	67,1	60,3	69,3	67,9	69,1	62,1	41,7	53,5	36,3
Antequera	67,1	68,4	61,9	70,6	69,3	70,6	62,7	42	54,8	38,5
Average Value	65,8	67,1	59,9	69,2	68,2	69,3	61,1	42,2	54,2	39

Source: IEA

The main indices used for statistics analysis of the level of noise are the percentile Ln levels, which are those exceeding levels of noise during various percentages of time. The most used will be L10 and LDN, corresponding to the day/night level, with 10 db of night penalization at night hours, where the "d" sub index refers to day and the "n" to night. The L90 is usually designated as the background noise detected in a certain place.

Thus comparing the data obtained in Torremolinos with data from other Andalusian towns, we can see that there is no significant noise pollution in Torremolinos and nor can we establish a relationship between increased noise pollution associated and tourism development.

2.3.3 Solid waste and water treatment

Solid waste

We only have data available from 2004 and 2007 from the Multiterritorial Information System of Andalucia, which prove us that in 2004, 44.973 tones of urban solid waste were generated and in 2007 some 61.617 tones. The storage of this urban solid waste is the rubbish dump of Torremolinos, which, although without having the necessary classification and reuse system, it does make a controlled treatment of waste.

[11] The city hall of Torremolinos has carrying out measurements since 1995, and its policy regarding noise contamination can be summarized in two main actions: preventive interventions (consist in the compliance with all applicable standards for licensing related to the opening of premises that may cause noise pollution); infringement actions –in case of receiving complaints from citizens, an inspection is made, if the defendant is not licensed, they proceed to the opening of disciplinary proceedings, should the defendant be licensed, they proceed to the corresponding acoustic measurement exceeding thresholds that also involves the subsequent disciplinary proceedings, if indeed the elimination of penalties or even closure of the activity.

The weakest aspect of these data is that they double the average quantity of waste/inhabitant/year in the province of Malaga, with the average of 598.14 kg/inhabitant/year in the various municipalities of the province, compared to that of 1026.77 kilograms on average in Torremolinos.

During the Survey conducted for the hotel managers (BPHS), none of them could provide us with more information on the annual volume of urban solid waste generated. With respect to recycling, a great majority of the hotel managers confirmed the lack of a classification of waste bins, which makes difficult, if not impossible, the recycling activities. Despite this, some 30% of the hotel managers recycle glass, paper and cartoon, 4% recycle oil, 22% packaging, while a 12% recycle batteries and some 7% other types of urban solid waste. It strikes that almost 45% of the hotel managers do not recycle any kind of solid waste.

In this case we face a major problem regarding the existing infrastructure for treatment and reuse of urban solid , as the municipal plant does not have this ability, but other plants in the province do have it. If we add this to the great amount of solid resources generated, much higher than in other cities and towns on the Costa del Sol, the municipality should have as top priority providing the appropriate infrastructure for sorting and recycling of solid waste.

Water treatment

The municipality of Torremolinos has no water treatment plant, so waters are treated primarily at the nearby plant Guadalhorce Wastewater Treatment Plant (GWTP) in Malaga, with an actual capacity of 165.000 m^3/day and after the recent opening of the plant in Benalmadena, it is estimated that some 40.000 m3 / day will be depurated here.

If we take into account these variables, the fact that the average daily consumption in Torremolinos in 2000 was of 50.000 m3, and the increase in consumption during the summer months due to the exponential growth of tourists, it gives us a clear picture of the insufficiency of the depuration system. This system does not have the capacity to treat the residual waters generated in Malaga and the municipalities of the Costa del Sol, having as consequence the dumping in the sea of not sufficiently treated water and the appearance during every single year of the "spots" in some of the main beaches of the Costa del Sol, among which Torremolinos. In the near future the construction of a new plant is envisaged, which will increase the capacity for Torremolinos, Churriana, Alhaurín de la Torre, Campanillas and Málaga capital.

With regards to the reuse of these waters, the GWTP of Benalmadena uses part of its treated waters for garden irrigation and different Golf Camps on Costa del Sol, while the big treatment plant of GWTP in Malaga uses almost the whole quantity of treated water to cool the engines of the electric power plant of combined cycle located in Campanillas.

2.3.4 Land uses and coastal line development

The human intervention has deeply transformed the landscape not only in Torremolinos but also of the Costa del Sol. Great areas of the land are used with tourist and residential purposes, leaving natural vegetation visible only in inaccessible places (high slope, high altitude…).

The approximately 20 km2 of the municipality are divided according to specific uses, where the non-agricultural area (urbanized areas, infrastructures, equipment,…) occupies the great majority of the municipal area (64,15%).

The second largest important type of land is the so-called "Mediterranean scrubland" with a 29,75 % (woody mountain), followed by wasteland and grazing land, with 3 %, which stay for plane areas where the presence of pasture is merely accidental.

As shown in the table, changes in agricultural land use registered a decrease from 53% in 2002 to 35% in 2008.

Table 23: Hectares and distribution of the land uses in Torremolinos

Year	Herbaceous crop	Woody crop	Timber forest	Woody mountain	Wasteland & pasture	Non agricultural land	Rivers and lakes
2008	20	0	3	600	71	1311	12
2007	20	11	3	509	181	1281	12
2006	20	11	3	600	90	1281	12
2005	40	11	3	600	90	1261	12
2003	7	11	3	600	90	1294	12
2002	44	26	3	870	110	952	12
Porc 2002	2,18%	1,29%	0,15%	43,13%	5,45%	47,20%	0,59%
Porc. 2008	0,99%	0,00%	0,15%	29,75%	3,52%	65,00%	0,59%

Source: IEA, 2002-2008

The coastline is one of the resources most threatened by urban development. To determine the artificiality of the coastline of Torremolinos, we will consider the whole length of its coastline, and into the land the first 1000 meters from the beach.

The result of the analysis, as shown in images below, is conclusive: out of the 6 km of coastline in Torremolinos, only 100,000 m2 have been left undeveloped, considering that the percentage of developed land in the 1st km close to the coastline is of around 85 %. The image shows that the undeveloped areas are concentrated in the east of the county (Los Alamos area) very close to the airport and the mouth of the river Guadalhorce.

Regarding the undeveloped shoreline (green in the picture), only 530 meters (9% of the entire beach) do not show buildings constructed in the 1st beach line, although we can not properly speak of non-development, as this area is situated in a fully constructed boardwalk and with plots ready for construction. This is one of the worst indicators of Torremolinos and the Costa del Sol.

Image 1: Urbanized Coastal Line

Source: Own elaboration, Google Earth 2010

Image 2: Single unbuilt areas, Los Alamos

Image 3: Urban centre and Bajondillo Beach.

In conclusion, the territorial implementation model derived from tourism activities has caused (a) the emergence of an urban continuum, (2) has created serious inefficiencies, which affect the level of consumption of resources and infrastructure development and this in turn leads to a multiplicity of public economic costs. There are several economic and social indicators which show that this model of tourism growth trend must change: the average daily "pocket" revenue per tourist has fallen and there is discontent among some businessmen, tourists and area residents. As happens in any industry, there comes a time when more production means less efficiency, resulting in more costs and fewer benefits. Growth does not always involve development.

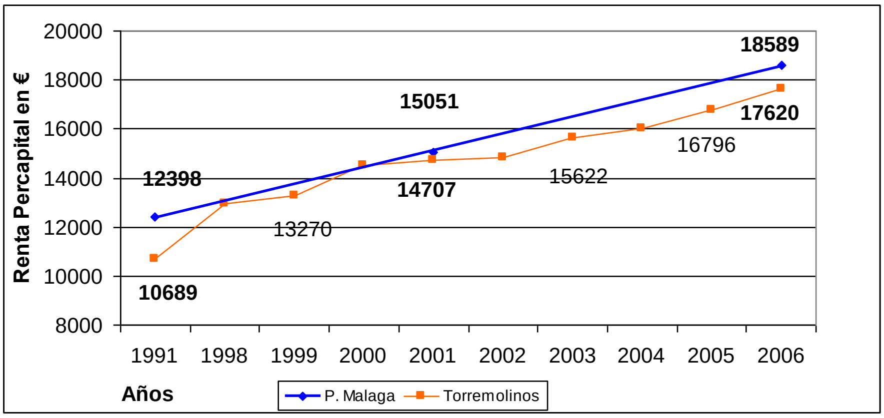
3. Impacts of the tourism activity in Torremolinos

3.1 Economic Efficiency

The most significant fact for assessing the impacts on the economy is the GDP. However, there isn't any Spanish source that can offer such data on a regular basis at local level. The most representative data that can give a similar magnitude are ***labour income***.

The first point to note is that income from work in Torremolinos (€ 17.620) are lower than in the province of Málaga (€ 18.589, which means 5.5% less), while the evolution of the average income during 1991-2006 in Torremolinos has grown more (65%) than in the province of Malaga (50%), from € 10,689 to € 17,620.

Figure 27: Evolution. Average Income in Torremolinos and the Province of Málaga (1991-2006)



Source: Own elaboration, data from INE and IEA

However, if one compares the average income of Torremolinos and Malaga with the Spanish average (€ 22,260), we see that we are still at the bottom of the list at national level (26% and 20% less, respectively). These differences are further accentuated when compared with more dynamic Spanish cities and regions such as Madrid, which exceeds by more than 30% the Spanish average.

A detailed analysis of the hotel sector provides more information on the economic impact and added value of tourism. Extrapolating the national framework[12], in 2001, the profit margin of the hotel sector in Torremolinos is just under 292 million Euros, which means that only the margin of the hotel industry could have paid the salaries of all earned income in Torremolinos.

The evolution of the hotel industry margin demonstrates once again that the faster a destination grows in the number of tourists the lower the economic return. At constant prices of 2006, the margin of the sector has declined from 115 million Euros in 2001 to only 87 million Euros in 2008, representing a fall in profitability of more than 24%. The decrease in the room price and revenue contributes to the reduction of the margin from almost 56,60 % to 52,50 %.

When comparing the margin of tourism with other sectors, we can understand the status of the tourism sector and its manoeuvre capacity when addressing the crisis and necessary reforms. In the case of the industry, the margins are much lower than in the tourism sector, regardless of the workforce, and calculating the margin with only the net amount of turnover and operating costs, with the purchases of materials and the subcontracted work. The "gross margin" of the industry in Spain in 2008 was 34%, and by adding the remaining costs related to human resources costs, taxes, etc., it stays in only 5%. In trade and agriculture these margins are traditionally lower, and only the high added-value services such as consulting and new technologies have higher margins, and consequently, higher added values.
As outlined in Chapter II, the decrease in the number of overnight stays and the length of stay

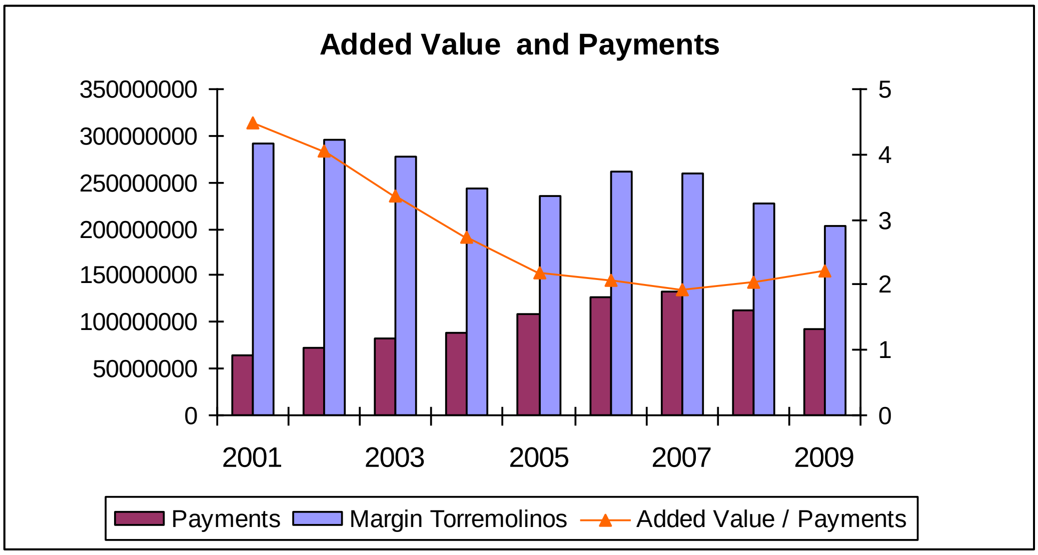
Table 24: Margin of the Tourist Industry

	2.001	2002	2003	2004	2005	2006	2007	2008
Value added rate Hotels CNAE	56,60%	55,70%	54,70%	53,90%	53,40%	53,20%	52,90%	52,70%
Income Hotels in Torremolinos	173.062.898	178.154.256	186.706.133	177.157.337	178.541.957	204.690.324	201.146.852	177.598.709
Payments	75.109.298	78.922.335	84.577.878	81.669.532	83.200.552	95.795.072	94.740.167	84.004.189
Margin Torremolinos	97.953.600	99.231.920	102.128.255	95.487.805	95.341.405	108.895.252	106.406.684	93.594.520
Added value / Payment	130,41%	125,73%	120,75%	116,92%	114,59%	113,68%	112,31%	111,42%
Index National IPC	84,48%	88,00%	90,70%	93,50%	96,60%	100,00%	102,80%	107,00%
2006 prices level	115.948.864	112.763.546	112.600.061	102.125.994	98.697.107	108.895.252	103.508.448	87.471.514

Source: Own elaboration, data from IEA.

12 The national margin has been calculated with tourism income and payments provided by the INE and based on data from the Bank of Spain. Thus having all income and payments for tourism we can obtain the margin of the tourism activity itself. Excluding investments, and the depreciation of assets, and counting only variable costs, we can approach the added value of the tourism industry in Torremolinos. Having the income and the payments, we obtain the margin and an approach to the added value of the tourism industry, the margin being only the ratio expressed in % of the added value between total revenues (It-Cv) / It. At the same time we can consider the annual profitability of the tourism industry, as the ratio between the margin and the payments in the industry.

Figure 28: Added value and payments



Source: Own elaboration, data from INE.

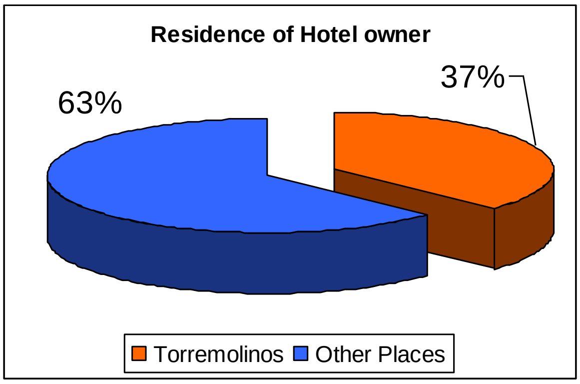
Other interesting data in this analysis of economic impacts is the ***multiplier effect*** of tourism on the economy. The Exceltur study (2005) estimated that for every dollar generated by tourism an average € 1.52 are generated in coastal destinations. The multiplier effect is not the same in all places because it depends of the economic relations, the number of enterprises with foreign capital, foreign dependence ... In Torremolinos the multiplier is effect only reached 1.09 €. Direct revenues in 2009 amounted to 446 million Euros, and if we work with the hypothesis that this factor has not changed, the dragging effect reaches 486.14 million Euros in 2009. If the Spanish average (1.52 €) were implemented in Torremolinos, the dragging effect would amount to 677.92 million Euros. The difference between the two multipliers means that Torremolinos does no loner bring 126.17 million Euros.

Regarding the ***economic leakages***, this is a rather complex matter, as we have no input-output table of the tourism or the satellite accounts. One way to approach this is to find some variables related to the hospitality industry and influencing the economic leakages, such as the habitual residence of the hotels owners, the potential membership to a hotel chain that has its head office outside the study area[13], the workers´ residence and the use of local suppliers and local raw materials.

Out of all hotels in Torremolinos, more than 60% belong to owners who do not live in Torremolinos; there is only one local hotel chain (MS Hotels) and 55% of hotels and aparthotels belong to small local businessmen; in addition, 60% of workers do not reside in Torremolinos. Regarding the tourism suppliers, the survey results show that 68% are local (please refer to the example below on Carrefour). From these data, we can estimate that economic leakages are very prominent in Torremolinos.

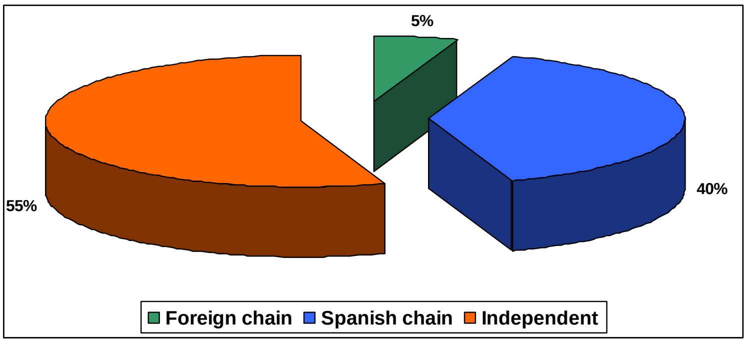
[13] This supposes two negative aspects for the economic impact, (1) the direct economic leakage of the flows that go directly to the matrix of the non-local chain and (2) the lack of economic flows injections from investment realized in other destinations (Alcazar, 2001)

Figure 29: Hotel owner residence



Source: Own elaboration, data from BPHS.

Graphic 30: Hotel chain membership



Source: Own elaboration

The assessment of the economic leakages must consider the following issues:

1) According to the inventory of hotels and residences made, 45% of the hotels-aparthotels are hotel chains and the rest are small independent hotels, the majority of low category; among the hotel chains, the foreign ones are few 5% (3 hotels), while the Spanish ones dominate (40%), especially the Sol Melia chain (7 hotels). There is only one chain - MS Hotels – of local origin. What is striking is that with Torremolinos and the Costa del Sol as the veteran tourist destinations in the Spanish and Mediterranean area, there has been no entrepreneurial capacity able to create strong local companies and export this tourism business model to other emerging destinations, while hotel chains of Balearic and Catalan origin have continued to expand their model in the major international destinations (Sol Melia, Riu ....).

2) A fundamental, yet difficult to reach aspect when talking about the concept of "economic leakages" is the consumption of local products and the implications for the local economy. The current economic globalization involves the relocation of the activities, economies of scale and low prices of non-European producers; hence, in a destination as developed as Torremolinos, where agriculture and industry are of minor importance, the majority of raw materials and processed products are imported, both for the tourism industry and for usual residents. When hoteliers claim that 68% of suppliers are local, they actually mean that, for example, the milk provider is a business located in Torremolinos (like Carrefour), but the milk product is Austrian and the trade is French. The same goes for bread, butter, sausages, and almost all consumer goods. The opposite paradox can also occur, for example, the orange juice is distributed by a German chain, while the oranges are from the Valley of Guadalhorce (Málaga).

This last example is symptomatic, because in the north of Torremolinos, in the Guadalhorce Valley of Guadalhorce there is a production of high quality oranges that are exported to Valencia (it has an extensive network of commercial channels), but are packaged in the German supermarkets Lidl (located Neckarsulm) and are distributed in Spain from Madrid until they reach the trade located in Torremolinos; summing up, the trip of the orange product can be the Valley of Guadalhorce - Málaga-Valencia-Madrid-Neckarsulm-Torremolinos.

3) The last factor to consider is the scale, as the question is: when we speak of the concept of "economic leakage" of the destination, what should we consider as the destination: Torremolinos, Costa del Sol, or the linear urban area of Málaga-Torremolinos-Benalmádena-Fuengirola? Therefore, working in Malaga but residing in Torremolinos or vice versa is very common, as it has been demonstrated; but to what extent does this suppose a local economic drain and not one referred to a major destination like Costa del Sol?

In conclusion, after 60 years of a tourist (and real estate) monoculture, the economic impact of tourism is becoming less positive, which is closely related to previous reports: lower profitability, a domino effect and a very high risk of important economic leakage. The growth, thus, does not prove to bring a further economic development.

3.2 Social Equity

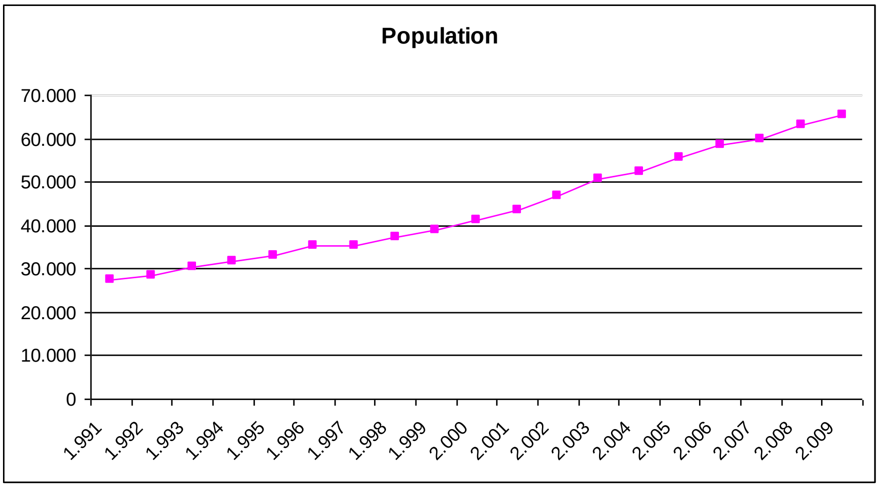
The social dimension of the *impact* indicators focuses on the activity undertaken by the population (employment and unemployment), population dynamics (changes in the population, structure by age and sex, dependence) and social cohesion (poverty, inequality, training level, life expectancy ...).

Since the beginning of its development until the present time the population of Torremolinos *has changed* radically; today, there is hardly any evidence of the indigenous population, replaced by a new society, more open, more cosmopolitan, but also more individual and less involved in the traditional and territorial values, and less prone to citizenship. The balance sheet cannot be judged as positive or negative, this is simply a different society.

The following sections examine how the population dynamics, the socio-economic and social cohesion indicators have evolved. The goal is to establish the impact generated by tourism activities.

The first social impact on tourist destinations is the ***growth of population***. Indeed, since the beginning of tourism in the late 50s Torremolinos population has increased by fourteen (14,80%), shifting from 3.991 in 1950 to 63.067 in 2008. This dynamic is not unique for Torremolinos, the Costa del Sol has become the fastest growing area of the province, in the region of Andalusia and one of the most important in Spain. We have to take into account that Torremolinos was a fishermen village in the early twentieth century with about 3.048 inhabitants in 1900, losing population in the first decade of the twentieth century (2.830 in 1910) and remaining at nearly four thousand until 1950. The exponential growth begins in the 60s and 70s, with a population of 7.980 in 1960 to 20.484 in 1970.

Graphic 31: Population evolution in Torremolinos (1991-2009)



Source: Own elaboration, data from IEA.

In a more detailed analysis of the last twenty years (in order to be comparable with other study variables) we can see that the population of Torremolinos has grown around an annual average of 7.2% over the period 1991-2009, passing from of 27.543 inhabitants in 1991 to 65.448 in 2009.

The significant population growth is primarily the result of a special immigration process, driven by the labour demand and the proximity of Malaga[14]. In turn, this massive immigration would have generated some rejuvenation demographic processes that result in high fertility and birth rates. Immigration increased dramatically during the first half of the century, coinciding with the greatest economic expansion. The majority of the immigrants are nationals (foreign immigrants account for 30% in 2009), especially from nearby municipalities, constituting the majority of them active workers. With this young and active migration, natural growth also increases with high birth rates; for example, in 2008, the birth rate rose to 10.5 per 1000 inhabitants (692 births), higher than the Spanish average of 9.8 births per 1000 inhabitants. These dynamics also appear to be starting to change, as in the last two years (2008-09) the foreign migrants are increasing (524 in 2008 and 859 in 2009) due to reduced employment opportunities in the area.

This dynamic makes interesting the study of the population structure (age and sex). In Torremolinos the aging population is not as high as in other municipalities of the Costa del Sol and Spain. For example, in 2001 people over 65 years represented 17% in Spain, while in Torremolinos only amounted to 12.9%. But in recent years this trend has also changed: in 2009, this figure amounts to 13.9% in Torremolinos, while in Spain it falls slightly to 16.6%. The aging of the population has important social and economic consequences for any tourism destination and any society. A population with a greater number of elderly will have a higher dependency ratio, a higher social spending and a smaller number of working population to generate the required contributions to pay pensions of the inactive population.

In the recent years, the demographic dynamics of Torremolinos has been changing, although it continues to be a destination that creates jobs and attracts young active people. Social impacts can be measured by employment and the dependency of the economic model to one activity. In the last twenty years we have experienced two economic crises: at the beginning of the nineties, when unemployment rates reached 32.5% and since 2006 a double crisis, affecting the engine sectors of the Spanish coast, the financial and real estate sectors.

[14] Torremolinos is one of the population expansion areas of Malaga, together with other municipalities of the coast (Benalmádena and Rincón de la Victoria) and the inner area (Alhaurín de la Torre, Cartama…)

Table 25: Immigration and emigration in Torremolinos.

	Number of people immigrating internally	Number of people immigrating externally	Number of people emigrating internally	Number of people emigrating externally	Total Immigration	Total Emigration	Emigration/ Immigration
1.990	676	117	246	..	793	246	0,31
1.991	1.248	184	417	..	1.432	417	0,29
1.992	710	403	277	..	1.113	277	0,25
1.993	1.300	124	769	..	1.424	769	0,54
1.994	1.571	101	895	..	1.672	895	0,54
1.995	1.606	105	1.013	..	1.711	1.013	0,59
1.996	1.684	177	1.171	..	1.861	1.171	0,63
1.997	1.018	126	868	..	1.144	868	0,76
1.998	1.968	451	1.142	..	2.419	1.142	0,47
1.999	2.473	551	1.431	..	3.024	1.431	0,47
2.000	2.602	782	1.623	..	3.384	1.623	0,48
2.001	2.769	1.267	1.489	..	4.036	1.489	0,37
2.002	2.319	1.617	1.521	..	3.936	1.521	0,39
2.003	3.574	2.377	2.075	..	5.951	2.075	0,35
2.004	3.565	2.136	2.495	..	5.701	2.495	0,44
2.005	3.716	2.011	2.845	..	5.727	2.845	0,50
2.006	3.890	2.032	2.553	..	5.922	2.553	0,43
2.007	4.092	2.121	2.950	..	6.213	2.950	0,47
2.008	4.405	2.058	3.249	524	6.463	3.773	0,58
2.009	4.013	1.859	2.941	859	5.872	3.800	0,65

Source: Own elaboration, data from IEA. (No data, starting with 2007)

In order to understand the situation of the active population, various aspects must be considered:

1) Tourism and construction have traditionally been the engines of the economy (45% of the employment in 2001 was dependent on these two sectors).

2) Spain has a structural unemployment, even during their economic boom periods; the unemployment rate is of 6-7%. The main reasons are: a highly "informal work", especially for independent activities (plumbers, painters, carpenters ...) and the economic model, not dynamic enough, and needing high rates of economic growth to generate employment; if the growth is lower than 2% of the GDP, there is no job creation.

3) This crisis, as discussed in Report II, does not produce a drop in visitors. In recent years, there is a moderate growth of tourists, but a shorter length of stay (overnight stays) and a drastic reduction of pocket spending, which fuels the vicious cycle where less spending produces a retraction in the economic activity of the municipality and an increase of the unemployment rate. This is why the economic crisis is stronger in the area which can be reflected in the annual unemployment.

As shown in the table and graphic below, is from 2006 when the situation changes and there is a marked increase in unemployment, mainly in construction and real estate (half of unemployment), followed by the hotel sector (19%) and to a lesser extent by business (14%).

Table 26: Population, employees, unemployed, active population

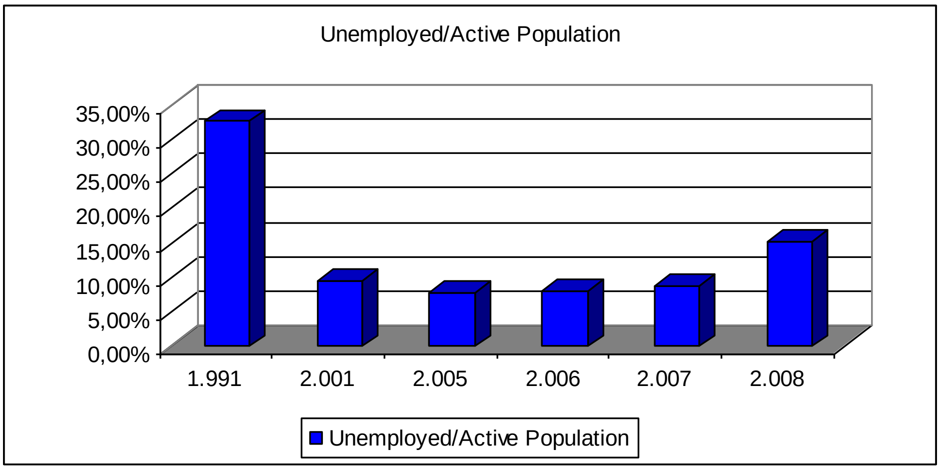
	1.991	2.001	2.005	2.006	2.007	2.008
Population	27.543	43.613	55.479	58.683	60.010	63.077
Total Employed	7.813	17.133	33.502	36.273	35.378	24.399
Unemployed	3.771	1.779	2.800	3.128	3.402	4.329
Active Population	11.584	18.912	36.302	39.401	38.780	28.728
Une/AP	32,55%	9,41%	7,71%	7,94%	8,77%	15,07%
TE/AP	67,45%	90,59%	92,29%	92,06%	91,23%	84,93%

Source: Own elaboration, data from IEA.

The last group of indicators report on ***social cohesion***. According to the EU[15], social cohesion is "a shared vision among citizens and the government on a model of society based on social justice, the primacy of rule of law and solidarity." On the northern shore of the Mediterranean this shared vision of society is taken for granted because the social and economic advances have benefited the majority of the population, however, we doubt that there is a shared vision of growth and the territorial model, and that we can talk of a fair and inclusive society. We believe that although we cannot speak properly about poverty, social and economic inequalities are a reality, although they are not to be compared with other Mediterranean countries. The existence of protection systems does not mean that there is social cohesion, but rather that this is not to be expressed as a "conflict" with planned or spontaneous popular demonstrations.

The three indicators analyzed for social cohesion determine that the impact of tourism has its positive aspects, but sometimes these depend on the economic context. Regarding gender, the distribution of employment has changed significantly with a positive impact. In 1991 the percentage of employed women only accounted for 33%; the situation is improving and in 2001 the female employment reaches 40%. At the time of maximum economic growth from 2005 to 2006, the percentage of female employment was even higher (51%), and only when the crisis begins, it starts falling apart. The data show that during periods of maximum employment there is almost complete gender equality, but in times of crisis women are more affected by the problem of unemployment.

Graphic 32: Unemployed/Active population



Source: Own elaboration, data from IEA.

[15] Information from http://eurosocialsalud.eu/proyecto/p1_1_1_1

Life expectancy in Torremolinos for the period 2005-2008 reaches 82.04 years for women and 77.75 years for men; these data are similar for the Malaga Province (women with 82.40 years and men with 76.52 years in 2006). This represents an increase of more than 0.20 years for every year since 1991, when life expectancy was of 79.15 years for women and 72.16 years for men. Comparing these data to those at national level, we can see that they are slightly below the national average, where women register a life expectancy of 83.49 years and men of 76.96 years (Annual Report of the National Health System); when compared with other destinations like Mallorca (women 84.43 years and men 78.5 years), life expectancy is somewhat lower in Torremolinos.

Regarding educational levels, vital to establish the development of a society and measure the capacity of human capital for new initiatives, the last data recorded (2001) revealed an illiteracy rate of 3%, although "functional illiterate (can read and write but have no education), amounted to more than 10%. The educational level presents a medium to low profile, in which the number of university graduates together with that of post-graduates hardly exceeds two thousand individuals (14%).

If we compare the level of training of hotel employees (according to EHPB) with the rest of the residents of Torremolinos, the results are very similar for both groups: university employees in Torremolinos account for around 14%, while university employees in the hotel sector 13%. Regarding the employees with a low educational level, in the tourism sector they count for almost 33%, while globally do not reach more than 10%.

The problem with such low-skilled employment is that the employees with a lower educational background are the most affected by the crisis, more than the university-educated workers. But the tourism sector requires lowly qualified personnel, so now we are facing a clear feature of the labour market: the activity does not require skilled personnel, and tourism and construction are the sectors that most workers demand.

In conclusion, the social impact after the arrival of tourism has been multiple and controversial. Torremolinos and the Costa del Sol have become one of the most dynamic areas of Spain with incredible growth that hindered the consolidation and good functioning of the territorial system, because of the rapid pace of the changes. The demographic structure is balanced but tends to the population aging, while social cohesion levels are high but with some distortions (increasing inequality, lower life expectancy than Spain and low levels of education).

3.3 Environmental Conservation

The rapid and profound human intervention in the study area has left a very prominent footprint on the environment. Before tourism, the natural environment of the study area had experienced the inherent modifications of agricultural activities and to a lesser extent of the "industrial ones: clearings in Sª Mijas, degradation processes by livestock. The impacts of the tourism development on the environment intensify and expand. The artificiality of space and urban growth (soil sealing) induced by the enormous growth of the resident and tourist population are reflected in a very human-touched, very urbanized space, which in recent years has spread dangerously inward.

From a tourism viewpoint, the problem arises when resources (tourism and territorial in general) are endangered. The pressure on resources leads to a loss of quality in the environment and landscape, which deteriorates the overall tourism product. With the new trends these lost resources are beginning to gain market value, which can impact demand and, directly, the competitiveness of the destination. In these terms, we present an analysis of indicators that measure the impacts on the environment, provoked directly or indirectly by tourism, which affect the low sustainability of the territorial-touristic model and may affect the future image of the tourism product.

The first resource to consider is ***water***. There is no public data on water consumption, despite that this information can be used to show that the pattern of consumption is completely unsustainable. The municipalities have the data to bill households and businesses, so the water consumption is registered in m3. Water is a political issue in the study area.

Nevertheless, some interesting data and studies can make us reflect on the importance of these impacts.

- Torremolinos is supplied exclusively by the underground aquifers of the Sierras de Mijas. This ensures the supply because it is estimated that the aquifer may reach 113 Hm3/year between Sierra Mijas y Sierra Blanca (Andreo, 1997).
- The availability of water resources depends on (1) the Mediterranean climate characterized by instability – periods of drought in 2-3 consecutive years and humid periods of 3-4 years – and the torrential rainfall, (2) the type of the landscape – lower water infiltration in areas of high slope such as Sierra Mijas and (3) the short water courses. These threes factors require that the natural water resources have big annual and periodic variations.
- Tourism exploitation is realized during the summer period, especially during the seasonal drought period.

In conclusion, in the absence of quantitative information, it is difficult to categorically conclude, but certainly the strong consumption in the area has a negative impact from two points of view. Speaking in absolute terms, the total volume of water consumed seems to have no limit, as new settlements are planned to be constructed in the future, giving birth to a population growth; in relative terms, the implementation model of tourism is highly consumptive per production unit (person or place).

Another interesting issue is water quality. The ***quality of drinking water*** is very high. The water is of calcium bicarbonate and bicarbonate magnesium calcium, slightly mineralized.

Regarding the ***quality of bathing water of the beaches*** in Torremolinos[16], the data demonstrate that the water registers the maximum rating in all beaches, except for the years of 1991, 1992 and 1998 during which a diminution was recorded. Undoubtly, there is a greater sensitivity and greater control, so there seems to be no negative impact. However, these average classifications do not prevent that during the summer periods, creams, oils and pollution stains appear annually, as it has been publicly denounced this summer (see photo below). The causes for the pollution are spillages of the water courses (by infiltration) and especially the improper cleaning and urban water sanitation and the inefficiency of urban outfalls caused by breakage or obsolescence. The hotel owners have actively demanded that all areas of housing benefit from integral sanitation systems[17].

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16 The main source of data, and of great value when comparing its quality indicators with other Mediterranean destinations, is the annual report on water quality of the Nayade service supplied by the Ministry of Health and consumption. Carrying out for its processing with Directive 2006/7/EC of the European Parliament and Council of 15th of February 2006 concerning the management of the quality of bathing water, transposed into Spanish law by Royal Decree 1341 / 2007 of October 11 on the management of the quality of bathing water (BOE No 257 of 26.10.2007)

17 The president of the Association of Hoteliers of the Costa del Sol (AEHCOS) said in his inaugural address on March 1, 2009 to "continue to work to achieve total sanitation on the Costa del Sol" (Hosteltur, March 2, 2009) http://webcache.googleusercontent.com/search?q=cache:9tpUcHL3BkYJ:www.hosteltur.com/noticias/59193_asamblea-general-aehcos-nombra-nuevo-presidente.html+torremolinos+saneamiento+aehcos&cd=5&hl=es&ct=clnk&gl=es&client=firefox-a

Another significant aspect is the failure to obtain any blue flags for the beaches of Torremolinos since 2005. It is the only municipality on the Western Costa del Sol (from Malaga to Manilva) that has no beach with this qualification, while the rest of the Malaga coast boasts 19 awarded beaches in 2010. Since the Blue Flag award is voluntary, it cannot be said that the beaches are not always in good condition. However, we think that this rejection of the blue flags is a sign that the sanitary conditions of the beaches are not always appropriate.

Contamination of the Carihuela Beach (Torremolinos)

Source: *El País,* 06/07/2010

Another impact to consider is ***air pollution***. Tourism is known as the "industry without smoke" and the observed values can demonstrate that, indeed, the impact is very low. The compiled data are not from Torremolinos because the Andalusian Atmospheric Observatory has only three measuring points on the Costa del Sol (the Atabal and Carranque, both in Malaga city and Marbella) with statistics from January 1997. The most important thing is not to surpass the thresholds considered as harmful for public health[18]. During the functioning years of this service, the threshold established has not been surpassed in any of the measuring points; on the contrary, 50 annual alerts have been detected in Seville, Huelva and Cordoba caused mainly by industry.

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[18] Normative facilitating this information: the current normative regarding the troposphere ozone (R.D. 1798/2003) and for the nitrogen dioxide and the sulphur dioxide (R.D. 1073/2002) obliges to inform the population, in case one of these contaminant elements surpasses the admissible thresholds: the threshold for population information is 180ug/m3 as hourly average for ozone, while the alert thresholds are 240 ug/m3 as hourly average for the ozone, 400 ug/m3 as hourly average during three consecutive hours for the nitrogen dioxide, 500 ug/m3 as hourly average for three consecutive hours for the sulphur dioxide.
The Decree 74/1996, of 20th of February, which approves the Air Quality Regulation, states in the Article 20, paragraph 1, that the Central Services of the Environment Council have the obligation to control the real situation of the air quality in Andalucia, and are due to report when the emission levels in a determined area are surpassed to the Environment Counsellor and the Government and Health Councils, warning on the possibility to declare the emergency status, according to circumstances. Since 1998, according to the maximum transparency policy of the Council ship, it has been assumed the obligation to inform the population each time the thresholds established by the current legislation are surpassed, irrespective of the type of substance that would have causedthe incident.

Table 27: Quality of atmosphere

Ago-06	Good	Acceptable	Bad	Very bad	Valid days
Carranque	0	26	3	0	29
El Atabal	0	28	3	0	31
Marbella	0	18	13	0	31
Ago-08					
Carranque	0	13	17	1	31
El Atabal	0	17	14	0	31
Marbella	0	26	5	0	31
May-10					
Campanillas	12	19	0	0	31
Carranque	0	22	9	0	31
El Atabal	4	21	6	0	31
Marbella	0	31	0	0	31

Source: Environmental Ministerial Department

One of the major environmental impacts is the destruction and conversion of natural habitats, because it affects biodiversity. Changes in the land use and the urbanization have broken the natural balance. To this we must add other minor impacts that affect the area as the predation of domestic animals, the vehicular accidents caused by the artificiality of habitat, etc. This transformation could diminish the protection of areas but in Torremolinos there is no Natural Protected Area.

Currently there are two ***endangered species***: the chameleon (*chamaeleo chamaeleon*) and the plant species known as "evergreen malagueña" *(limonium malacitanum*). The chameleon is disappearing because its habitat also disappears, its preferred area are the pre-littoral and coastal dune systems and in Torremolinos these spaces are very scarce; the same happens with the wetland of the Springs (north area, at the foothills of Sierra Mijas) where developments, recreational facilities and roads crossing the mountains transforms this natural area of high environmental value into an artificial one. The "evergreen malagueña" is endemic for the coastal cliffs of the provinces of Malaga and Granada (from Torremolinos to Marina del Este). Torremolinos populations have very few individuals, are isolated from other populations and although efforts have been made to reinforce the population in 2009, no significant results have been obtained. In both cases the greatest danger lies in the coastal urbanization, fragmentation and isolation of the populations, waste disposal and pollution.

As discussed in Report Chapter II, man has rapidly and profoundly transformed the landscape, the territory of the entire Costa del Sol. The tourist and residential use of the space meant that the natural vegetation is relegated to the most inaccessible places (steep slope, high altitude...).

The ***landscape quality*** has decreased and the landscape has been trivialized by the artificiality of the space. The soil has only received attention for its economic value and on a short-term perspective, without any criteria for integration into the environment. ***Soil quality*** in Torremolinos, according to the weighting factors assigned to this work, reflects the low value in the absence of agricultural land; the forest area does not exist because the vegetation is a Mediterranean-type degraded shrub land (small shrubs) and a conifer area that blends with the pasture area[19]; the rest of the ground is limestone with steep slopes (over 40%) and high value as it functions as an important aquifer.

[19] For this indicator the forest area was incorporated in that of pasture

Table 28: Soil quality

Use of land	Weight	Surface Hect 08	Surface * Weight	% Surface Weight/total
Crops	1	20	20	4,00
Forests	0,8	0	0	0,00
Pastures	0,5	674	337	67,33
Urban areas	0,2	717,6	143,52	28,67
Rocky areas	0	605,4	0	0,00
		2017	500,52	100,00

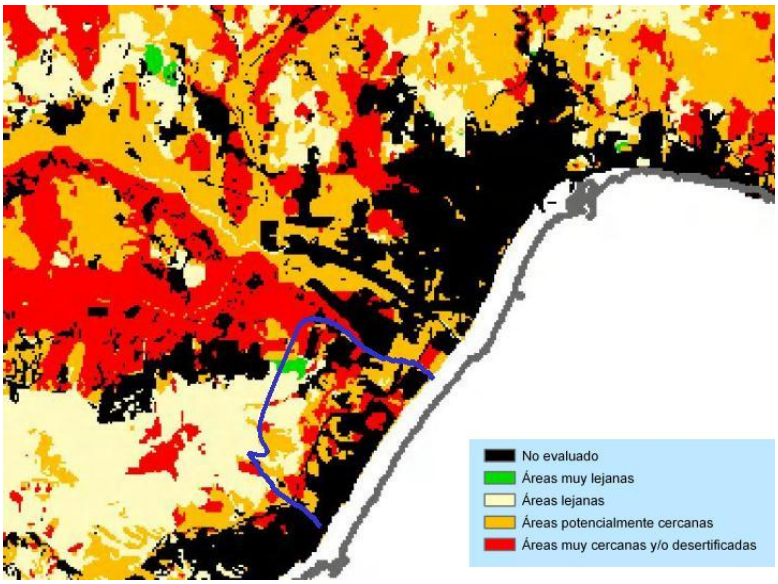
Source: IEA.

A negative impact to take into account is the degree of desertification. In the map below we can see how much of Torremolinos registers values close to desertification, even in the only plots in front of the coast; some areas of the Sierra Mijas are preserved and are classified as remote areas to desertification and the urban area is not assessed because it is assumed that it is already deserted.

The final indicator measures the ***urban quality*** starting with the population density, the quality of the atmosphere, the existence of natural or semi-natural green spaces and other public spaces, the quality of public transport, walkable surface areas, the existence of traffic congestion, level of noise, the quality of urban design and urban planning.

Human pressure influences many aspects and can be measured by the population density. In Torremolinos residents' density is quite high (3.300 residents/km2 in 2009) to which we must add seasonal visitors, whose number during the high season can cause an increase of the resident population in three, representing nearly 10,000 inhab/km2 in August. It is true that the Costa del Sol has municipalities with an even stronger human pressure (6.939 residentes/km2 in Fuengirola in 2008, which represents nearly 20,000 inhabitants per km2 in high season), but Torremolinos exceeds the average of the Costa del Sol (878 residents/km2), of the Province (217 residents/km2) and of Spain (92 residents/km2), causing a prominent impact.

Desertification map of Torremolinos



Source: REDIAM 2003. Government of Andalusia

In urban areas there are few green spaces, only the *Battery Park* and the *Pine Grove Springs* serve as lungs to the city and occupies only 265.265 m2. We have to keep in mind that the beaches have a garden role in the cities, concentrating sports facilities, the day and night entertainment offer, and recreational areas. Furthermore, all the beaches are bordered by a promenade which is a walking and recreational area, with 5,700m of length.

As for the quality of the public transportation, this is considered to be adequate. Transport to Torremolinos is very good; in fact the study area is part of the urban agglomeration of Malaga There are also several urban bus lines connecting Torremolinos to the coastal municipalities and Malaga city. Domestic transportation is of good quality but there are only two routes; given the growth of the city, some areas have no public transport such as the northeast area in El Pinillo and the eastern coastal strip of the municipality. However, a structural problem that has existed for decades is the lack of a central bus station, because the current bus halt is quite deficient to cover the large number of users.

Traffic congestion is caused by the high density, the poor planning in the beginning of the tourism development in the 60s and 70s and by its position as a primary gateway to the western Costa del Sol and transit area of the operation "crossing of the Strait" in the ports of Algeciras and Tarifa (Cadiz) in the Europe-Africa route. The access from the A7, the main artery of the entire coast, from Malaga to Torremolinos (east-west) is a conflict point for the frequent traffic jams; in fact it is one of the most saturated areas across the province if we take into account the Daily Traffic Average Intensity (DTAI) and the steady growth of traffic. The TDAI of the entrance to Torremolinos on the A7 (Point: 230.2 km Golf Course) has increased from 46.001 vehicles per day in 1996 to 84.093 in 2003, representing a growth of 82% in eight years[20]. Regarding the interior traffic of Torremolinos, there is a serious problem especially in summer at the exits from the A7 (Palacio de Congresos area of Torremolinos and leisure centre Plaza Mayor) and the centre of Torremolinos (Plaza de la Costa del Sol).

With regard to air quality and noise level, we can conclude that there is no severe air pollution and that the noise level is high at night, with the other variables under normal parameters, taking into account that modern cities are highly noisy. Finally, the quality of urban design has traditionally been of low quality, although it is true that some areas were valued for their design in the 70s but they have now ceased to be socially valued. Urban planning has been inexistent until the mid-80s, which meant that the current urban structure is little organized. At present there have been improvements, connecting roads and isolated neighbourhoods, contributing to a more rational urban system.

Generally speaking, the urban quality is the typical of an average city, with high densities and the dysfunctions of a tourist town (seasonality) in an urban sprawl. The positive fact is that its position facing the sea and its pleasant climate improve the perception of its quality. Regarding the impact on the environment, the strong pressure to which resources have been subjected over forty years evidences how the tourism growth has negatively affected the resources that enable the development of the destination and evidences the contradictions of the development.

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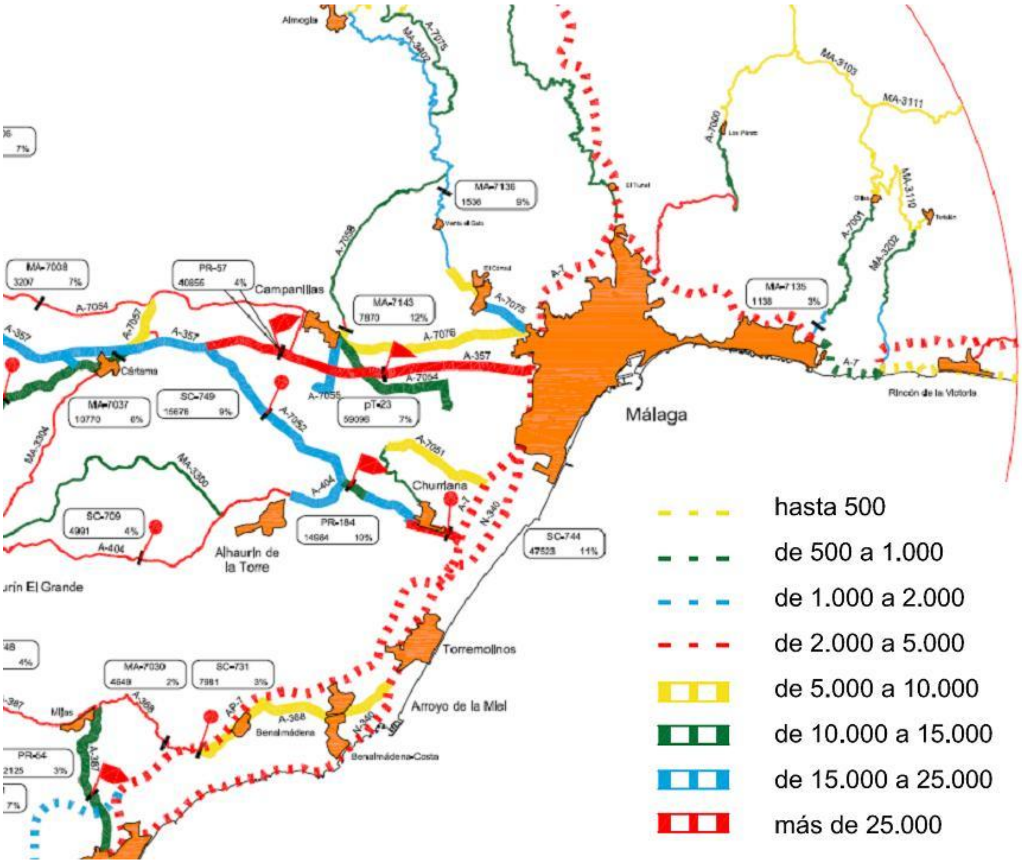
[20] Data from the study "The population growth and its relation with the resources and infrastructures of the western Costa del Sol" 2005 de Navarro Jurado, Navarro Villanueva y Carreira for the Tourist Requalification Plan of the Western Costa del Sol-PLAN QUALIFICA.

Map of Daily Traffic Average Intensity in Torremolinos



Source: Government of Andalusia, 2007

The conclusion is that the main causes of the deterioration of the destination and the environmental, social and now economic indicators are the following:

- The rapid pace of the changes occurred
- The lack of experience in dealing with a new type of activity in the first years of the development (the 60s and 70s)
- The lack of prevision caused by the non-execution of certain planning
- A highly accelerated growth
- The excessive trust in the private initiative
- A short future vision of the public managers, who saw local resources as an inexhaustible source of wealth

Today tourism competitiveness of tourism in mature coastal destinations cannot be separated from a due attention to the territory and its main components. Only parting from a more environmental-friendly management of tourist resorts understood as a global product (water quality, landscape, building types, a balance without overexploitation of resources, solid waste disposal, noise,...), from the restructuring degraded areas and from the protection of natural and cultural resources, can competitive strategies be generated on the global market.

4. Policies for the improvement of the performance and impact of the tourism activity in Torremolinos

The system of indicators ends by making reference to the *response indicators*, aimed at understanding the mechanisms of responses and the public and private initiatives that could lead to an improvement of the tourism destinations. Public Administrations structure these measures around a series of management plans and initiatives, and they can be grouped in a public document of "policies", whether tourist, urban, infrastructure, etc.

In a local destination the role of local politics is very important because it affects basic issues for tourists such as the street cleaning, local traffic, internal security, tourist information, including the urban settings of the space which depends on local planning policy; however, in Spain we must also examine the municipal, regional and national political competences, because they influence the economic, social and environmental (such as land policy, which affects the local planning) measures, the new communication infrastructures (airports, marinas, roads ...), the promotion policy under the brand name of "Costa del Sol", "Andalusia" or "Spain." These are just some examples of the complexity of the management of the space in the tourism destinations and how to analyze the "answers".

4.1 Measures of public tourism entities

First we must differentiate between the various poles and agents involved in the planning and touristic management of Torremolinos, and which can be grouped as:

1. Local level: Torremolinos City Hall. Council for Tourism, Hospitality and Foreign Residents
2. Municipal level ("comarca"): Association of Municipalities of the Western Costa del Sol. Department of Tourism.
3. Municipal level (province): Diputacion Provicial of Málaga. Tourism Board of the Costa del Sol
4. Regional level: Government of Andalusia. Council for Tourism, Trade and Sports.
5. National level: Spanish government. Ministry of Industry, Trade and Tourism.

The Torremolinos City Hall and the Associations of Municipalities of the Western Costa del Sol do not have any tourism planning. The Council for Tourism, Hospitality and Foreign Residents of the City Hall addresses issues that may arise in the daily management (campaigns for trade fairs, business relations, events, etc...), but not under preventive nor objective medium to long term criteria, that is, without an action plan to guide its future policy. As is clear from their website, local policy-makers highlight the values of the traditional tourism attractions (climate, beaches, nightlife, gastronomy,), the friendliness and openness of the local population, and the diversification of the main attractions based upon the creation of sports and cultural infrastructures that facilitate the recruitment of other market segments. According to the council, the leadership position of Torremolinos on the Costa del Sol does not depend on the quality of their demand but on the fact of bringing together the "40 percent of the total hotel infrastructure available on the Costa del Sol."

Torremolinos was elected in 1992 as a pilot project in the Framework plan for the Spanish Tourism Competitiveness - FUTURES I and a Tourism Excellence Plan was made (mature destinations plans to improve the supply and solve some bottlenecks in the destination). In addition to the actions taken, the objective of these plans was to create "a new intervention model that assumes the principles of institutional cooperation" (Foronda and García 2009, 93) between the three governments with financial implication of the state, regional and local administration.

With the participation of Torremolinos, the rest of the municipalities of the Western Costa del Sol and the Tourism Council of the Government of Andalusia elaborated the first tourism plan – ***Plan Qualifica*** – which will be applied to the ***Western Costa del Sol*** for the first time in its tourism history. Basically, the plan aims to expand and improve services, refurbish the urban spaces and preserve and restore the landscape. It has a budget of EUR 335.5 million distributed as follows: the Council for Tourism, Trade and Sports of the Government of Andalusia provides 117.1 million Euros, 166.8 million Euros correspond to other administrations (national, regional and local) and 51.6 million Euros, to private enterprise. This plan complements the Sub regional Territorial Plan of the Costa del Sol (POT-CSO), which envisages an investment of € 3754.1 million, with very important spending in improving public services and infrastructure - expansion of proximity train[21], waterworks and a new road between the A-7 and the old N-340.

The plan includes nine strategic action lines:

1. Revitalization of tourism centres and areas with the improvement of urban environments and the recovery of unique elements (€ 52.3 million, 15.6% of total).

2. Environmental quality of the destination. It aims at a sustainable land management, consistent with the new, more exigent tourism demand, measures that would enable energy saving and renewable energy use. It is the largest investing chapter (€ 148.1 million budget, 44% of total).

3. Modernization of tourism businesses and products. It provides incentives to companies which undertake modernization and renovation plans, mainly SMEs, and also reinforces the inspection with the aim of combating illegal establishments. Budget: € 53.8 million (16%).

4. Product diversification and differentiation. Encourage entrepreneurship in new tourism products, for example cultural or nature-related, which would help to diversify the attractions. Also includes the creation of centres of interpretation and reception of travellers and the establishment of the tourist ombudsmen. Budget: € 41.9 million (12.4%).

5. Innovation and new technologies. It includes programs to encourage a new entrepreneurial culture with continuous innovation, lifelong learning and human resources training, in order to professionalize the various subsectors that tourism comprises. Budget: 4.3 million (1.2%).

6. Employment and training qualifications. Its main objective is enhancing the employment skills with extensive training programs involving other sectors directly related to tourism and trade. It provides for the establishment of an observatory on the quality of employment. Budget: 25.7 million (7.6%).

7. Communication. An audit will be carried out on the image of the destination Costa del Sol, which will help outline the advertising and marketing strategies to be applied. In addition, the plan itself involves a strong media component to publicize the change that Costa del Sol will experience. Budget: 6.9 million (2%).

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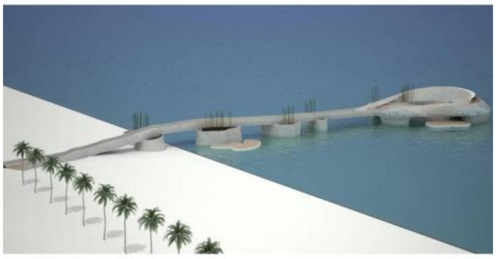
[21] At this moment, the proximity train unites the city of Malaga with the towns of Torremolinos, Benalmadena and Fuengirola, excluding the Western Coast (Mijas, Marbella, Estepona, Casares and Manilva).

8. Management plan. To ensure the implementation of the measures envisaged in the plan, a monitoring committee has been created to be chaired by the director general of Tourism Planning. In addition, a series of studies to provide support for the implementation of the plan will be conducted. Budget: 2.3 million (0.7%).

During the development of this plan € 3.1 million has been invested (Government of Andalusia € 1.9 million and the City Hall € 1.2 million[22]) in the refurbishment of the promenade of Torremolinos and the modernization of the hotels. One of the flagship projects is the intervention in the shoreline and beaches in order to have better accessibility, more environmental quality - understood as cleaning of sand and bath water and protection of flora -, regeneration of the river channels, improvement of the public facilities and the creation of a waterfront observation point, in Californian style. These actions are designed to present a modern image of the city, but in the end “is just a surgery"[23]. We cannot be more specific about the actions envisaged in Torremolinos because some projects have not been yet precisely defined and the plan is still active.



In order to deal with the plan budget, the *Consortium Qualifica of the Western Costa del Sol* has been created (a tourism management entity at municipal – “comarca” level), which involves all the administrations: 9 municipalities, 4 Councils of the Government of Andalusia (Tourism, Environment, Public Works and Housing, Territorial Management) and various ministries of the central government (Tourism, Environment, Foment), apart from the main syndicates and entrepreneurs associations.

[22] To this we add 8.4 million € that the Dirección General de Costas (Ministry of Environment) invested in the promenade of Bajondillo.

[23] Statements made by D. Antonio Muñoz, Director General of Planning and Tourism of the Junta de Andalucía on July 10, 2009 at the close of the Summer Course "The economic crisis and the future of tourism" organized by the University of Malaga.

This new voluntary management entity is a very important step ahead, as it offers a common view from all the public administrations towards the budget management of a plan, coordinating all the actors and unifying objectives. The Consortium demonstrates that many of the solutions proposed for the tourism destinations do not depend on major budgets or many initiatives, but of the coordination among the different administrations. The success of this model of territorial and touristic management has encouraged other destinations to create similar formulas in order to improve their competitiveness on the market.

At ***province level*** (Málaga province has 101 municipalities) the ***Tourism Board of the Costa del Sol*** is in charge of marketing and in this area we can testify that there is a constant and updated actions plan. In this way the ***Tourism Marketing Plan 2009-2012*** sets the following objectives:

<u>Overall objective</u>: To ensure excellence in destination management of Costa del Sol, advocating for the sustainable development and maintain its global leadership position through the use of the overall tourism offer of the province.

<u>Specific objectives</u>:

• Defend and enhance the leadership position of the Costa del Sol in the global tourism landscape.

• Increase the profitability of the entire tourism offer through territorial diversification of demand.

• Ensure the sustainability of resources, not only as mere instruments of attraction for tourists or as components of the destination's image, but as a philosophy of integral engagement of the community of the Costa del Sol

• Focus on excellence in management in order to meet both national as well as international customer requirements, which will ultimately improve the competitiveness of the destination.

It's good to have as main goals the sustainability and excellence, however, when assessing the actions that are budgeted in the plan we can see that investments are only for marketing activities (marketing, direct marketing and reverse actions with foreign agencies) and that these do not ensure "the sustainability of resources." We would also highlight the participation-collaboration between this *Marketing Plan* with the *Plan Qualifica*, as reflected in one of its biggest budget part, with nearly 14% of its budget.

The Marketing Plan of the Tourism Board has effects on the whole territory of the province (101 municipalities, including Torremolinos) and divides the different strategic lines and operative programmes under 4 main categories: General Strategy; Products Strategy; Markets Strategy; Communication Strategy.

The general strategy is based on the strengthening of the cooperation between the public agents of the tourism sector in the province of Malaga and the professionals of the tourism businesses, establishing, moreover, a program of Competitive Intelligence and Quality of Management. This is reinforced by a markets strategy, focused on segments of high profitability and market niches with high purchasing power.

The product strategy has as main objective help reduce the seasonality of the Costa del Sol destinations by focusing on specific products whose demand might occur outside the high season, and also on winter programmes, as well as an accessible tourism, eliminating barriers for the physically handicapped persons. Finally, the communication strategy establishes the importance of working on the destination brand, based on a quality, authenticity and great diversity image. This strategy is based on the new types of online marketing, social networks and web 2.0, and is targeting a more consolidated clients' loyalty programme and a social responsibility programme of the destination.

Table 29: Budget 2009. Key actions of the Tourism Board Costa del Sol (supra-local level)

Tourism Board	Euros	%
Commercialization actions	385.000	9,83%
Direct marketing actions	254.000	6,48%
Direct actions with mass media	90.000	2,30%
Training actions	67.500	1,72%
Reverse actions	383.000	9,77%
Strategic alliances	160.600	4,10%
Collaborations	50.000	1,28%
Fairs	338.600	8,64%
Professional Forums	278.600	7,11%
Destination image	231.000	5,90%
Technological Innovation	158.000	4,03%
Tourism Intelligence	300.000	7,66%
Professional workshops	280.000	7,15%
Online Marketing	397.000	10,13%
Plan Qualifica	545.200	13,91%
	3.918.500	**100%**

Source: Marketing Plan Tourism Board Costa del Sol 2009-2012, actions 2009.

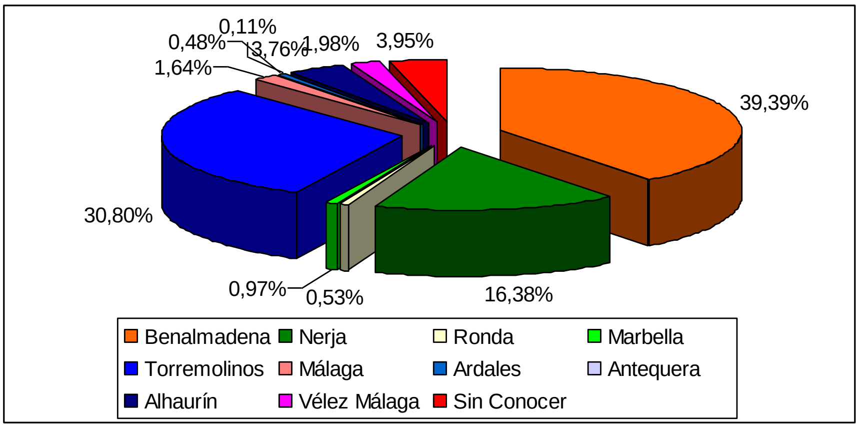
Among the developed actions, those with the major budgetary lines in 2009 were the ones proposed by the Qualifica Plan (with an investment of 545.200€) focusing on the following actions: social corporate responsibility, online campaigns in Edreams, United Knigdom, Irland, Germany, France and Italy, web positioning, and other actions on online tourism portals. Other online marketing actions significant in terms of investment totalled almost 400.000 €, and show the actual importance of new technologies and online marketing in tourism, as the major budgetary lines. Last, we highlight other commercialization actions (385.000 €) such as the celebration of Fam-Trips in different out-bounding markets at international level.

At the ***province level*** there are other interesting investments, although we can not say exactly which affect Torremolinos; however this information is valuable because the development of the Costa del Sol is similar to Torremolinos, so the government *responses* to the negative impacts of tourism are the same throughout the Costa del Sol. The ***Directorate General of Coasts*** (Ministry of Environment) invested in improving the coastline of the Costa del Sol 8.4 million Euros in 2009 and, among the actions affecting Torremolinos, a remodelling of the beach promenade of Bajondillo was done. We also have to add the 2 million Euros spent the Directorate General of Coasts in the annual regeneration of the beaches of the Costa del Sol (150 km) and the one million Euros per year used by the municipality of Torremolinos for the maintenance and conservation of beaches.

At the ***autonomous community*** level, the Ministry of Tourism, Trade and Sports has a budget of 468.3 million Euros, within the general budget of the Government of Andalusia, which made Andalusia the first Spanish community in tourism spending. The main thee priorities are: improving the competitiveness of the destination, the specialization and diversification of the supply and the creation of new tourist products. As in other cases, we cannot specify the amount that directly affects Torremolinos, but it is true that in this budget the contribution to the Plan Qualifica is one of the most important along with training and developing of new products. Some figures serve as examples to see what is supported by this regional government.

In 2010, the Tourism Council has invested just € 107.293 for "education and research" in the province of Malaga, which is a very low figure[24]; regarding the "improvement and development of tourism services and new products", it has invested €1.830.614 in 27 projects across the province, where Torremolinos gets 7 projects (25%) with a funding of € 563.830 for durable equipment such as air conditioning, heating, swimming pools ... The positive fact is that Torremolinos is the second city with more projects after Benalmádena and the two amount to 70% of all investment in Andalusia. In conclusion, the main investments make it difficult to reach sustainability goals while the sustainability policies remain mere "letter of intents", since the main investment is done in replaceable durable equipment, and without giving any importance to innovation and sustainability of tourism products.

Figure 33. Percentage of the amount awarded in grants by Tourism Council in 2010.



Source: Provisional Resolutions 2010 ITP mode.

Department of Tourism, Trade and Sports, Government of Andalusia.

Also of interest is the *Marketing Plan of Andalusia* (2009-2012), which raises specific and quantifiable goals. It contains a philosophical shift that must be valued because the main goal is to have a "more profitable tourism activity, better distributed in time and more balanced geographically"; it sets out as specific objectives the "increase by 10% of the average daily expenditure per tourist in Andalusia" and "a 20% increase in tourist arrivals in mid and low seasons, with a more balanced distribution throughout the territory".

At a ***national level***, the Ministry of Industry, Tourism and Trade is running the ***Plan 2020*** that serves as a general framework for other actions (Plan for Tourism 2008-12, Plan Futures ...). The Plan 2020 has as a main objective the improvement of the living conditions of citizens and strengthening Spain global leadership in tourism. For this purpose the development of tourism in Spain today and tomorrow will be based on competitiveness and environmental, social and economic sustainability with four main lines of action: (1) Development of sustainable business models both environmentally, socially and culturally, (2) Incorporating the culture of innovation and continuous improvement as something normal in the sector, (3) Attraction of talent and entrepreneurial culture inside the Spanish society towards the tourism sector, (4) and social awareness of the importance the tourism sector in Spain. The budget is of 6.885 million Euros, which seems an important figure; however, it becomes low when considering other budgets of this ministry, namely the industrial area that counted with € 1,000 million only for Plan E[25] for supporting the automotive industry.

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[24] Only five projects were approved, among which one is a research Project, with a very small budget of €28.938.

[25] Spanish Plan for the Incentive of the Economy and Employment (Plan E), arises in 2009, as a tool to face the worldwide crisis

4.2 General measures of public institutions that affect tourism destination

As mentioned in the previous section, the institutions involved in planning and land management in Torremolinos are of various types (national, regional, supra-local and local) and of very different competences (planning, infrastructure, environment, culture ...). The various actions and strategies of each agency makes our analysis complex and it is possible that the conclusions drawn do not differ much to those we propose. Due to this diversity of responses and characteristics of tourism and territorial development of Torremolinos, we have opted for showing the strategies that impact on urban planning (***PGOU***, General Plan, the main instrument for urban planning) and territorial planning (***POTAUM***, territorial management tool for the Metropolitan Area of Malaga).

The *General Urban Plan (PGOU)* is the basic instrument of municipal spatial planning, according to which the system of facilities is defined, the soil is classified according to urban functions (urban, developable and undeveloped) and the rules applicable to each class of soil are established (detailed regulation, generic regulation and preservation regulation, respectively). Generally the Plan determines the structural shape of the space on the medium term; this significantly affects the economic development of the municipality (the sale of land and economic functions assigned to the ground) and consequently, the population distribution, social functions and artificiality of natural areas. All these affect tourism offer and hence the demand segments. It is the most important development strategy of the local government.

The ***PGOU*** of Torremolinos has several years of litigation between the different administrations endowed with powers for its approval. At first (2006-2007) the plan posed a very high growth (reach 120.000 inhabitants in 8 years); it moved towards a bedroom city model rather than towards a tourist town, encouraging the construction, occupying more space at the expense of losing the few existing green areas, building in the intermediate zone of Sierra de Mijas, above the highway and re qualifying the few existing industrial land to make it urban. In addition, it proposed the increase in the building density through the height of buildings; for example, areas where mono-familiar houses were planned, became areas with four-story buildings (Camino del Pilar), part of an industrial zone passes to an urban one with 7-storey blocks (north-east), including the building of 22-storey buildings in the city center (City Market area). In summary, in proposes increasing the heights, taking advantage of the only available space in the green areas, mountains and industrial zone to increase the floor area; this implies doubling the population over the next eight years, from the current 63.000 residents to 120.000 residents. However, these intentions of the municipality of Torremolinos were totally paralyzed both by the competent authority of the Government of Andalusia, against any development in the Sierra de Mijas, above the highway, as well as by the Directorate General of the Coasts regarding the pplanned height.

These strategies call into question the sustainability of the model. The venture between construction and tourism has been introduced as "economic culture", not only in Torremolinos but on the Costa del Sol and the Spanish Mediterranean also (Lopez et al., 2005). It implies some dubious agreements between the municipal government, construction and real-estate companies; the result has been many cases of economic and politic corruption which are now being judged in the courts. The underlying problem is the form of financing for Municipalities, as by changing the pertaining class of a parcel of land (re qualification), the land is taken into account for its future urban development[26].

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[26] There have been no criminal prosecutions for urban corruption in Torremolinos and in other parts of the Costa del Sol such as Estepona, Manilva and Marbella (this is the best known case of corruption for its volume of Euros – 4000 millon embezzlement which has led to 95 suspects - and its political relevance, as this constituted the first case of dissolvment of the executive power of a municipality in Spain and instead was replaced by a policy management unit). However, there is evidence of illegalities in Torremolinos yet unconfirmed. The case is: the company "Arenal 2001" signed in 2004 a planning agreement to build 750 homes

After four years of litigation, the City Hall of Torremolinos, attacks in February 2010 the requirements of the Board and the Directorate General of Coasts, rectifying the General Plan, and cancelling the planned construction above the highway over Sierra de Mijas and different constructions. The new strategy of the plan focuses on correcting the major imbalances in Torremolinos, which has more than 7,000 units of about 30 sq meters. For this, it will not be allowed to build houses of less than 45 sq meters, thus avoiding the situation of slums.

The Territorial Plan for the Metropolitan Area of Malaga (***POTAUM***) establishes the basic elements for the organization and structure of the territory of Malaga, affecting twelve municipalities[27]. It is an instrument of the Government of Andalusia and is has as main objective (since it cannot legislate on the specific use of urban land, this being a competence of the PGOU) to improve the organization of the territory by ensuring the accessibility and functionality of municipalities (the central and coastal), enhance the functions to be developed in Malaga and preserve the spaces with environmental, landscape, productive, historical and cultural values. Specifically, the POTAUM wants to organize the development of the territory and for this it reserves large areas (called "opportunity") of logistics, technology, agro-food for business activity, residential content and finally tourism *dynamization* areas. However it diagnoses that strong concentration of population and tourism on the coast leads to "*dis economies*" of scale with significant negative externalities on the welfare of the population. It also analyses how the "new tourism trends, which demand a complementary quality offer (cultural spaces, monumental routes, thematic parks, sports fields, etc) can act as a brake to the expansion and development of tourism activity on the Western coastal agglomeration because of the high building density, thus requiring a new model of land management "(*POTAUM*, Information Report, p 7).

The actions planned by the *POTAUM* for Torremolinos are the improvement of energy supply, water infrastructure improvements, expansion and improvement of the extraction of groundwater resources and ensure the development does not affect Sierra de Mijas. However, the major actions of *POTAUM* focus on non-coastal less developed cities; although it raises awareness on the saturation and new tourism trends unfavourable to the current offer on the Costa del Sol, it does not plan significant actions of reconvention in this area, but a higher growth in infrastructure in the rest of the municipalities.

Respecting the legal autonomy of each public administration, this analysis reveals how the City Hall and the Government of Andalusia have different *responses* to the same event: while the former lays the foundation for further growth in size and height, the second relegates no action to Torremolinos (what can be done in such an urbanized area?) and just provides the necessary infrastructure for further growth.

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in the Sierra de Mijas and for that the municipality of Torremolinos received 5.3 million euros and three lots valued at 1.3 million of the company. In 2004, the land sold was still "undeveloped" and needed the re-qualification of the soil. Currently the project is stopped because the two environmental impact reports have rejected it, and if it doesn't get the approval from the Regional Administration, the City Hall will have to repay the money received plus the appropriate compensation for damages. Given the legal irregularities, the Accounts Chamber of Andalusia issues a report that says that the City Hall of Torremolinos "does not have a specific inventory of municipal assets of land, does not control the resources embodied in land nor does it have a specific control of the revenues management of the soil, breaking the Local Finance Governing Law". Due to this report, the Court of Accounts opened in March 2010 an accounting liability proceeding against Torremolinos.

[27] Alhaurín de la Torre, Alhaurín el Grande, Almogía, Álora, Benalmádena, Cartama, Coín, Málaga, Pizarra, Rincón de la Victoria, Torremolinos, Totalán.

4.3 Response indicators of Blue Plan

The system *response indicators* report a precarious concern for the environment. There is no Natural Protected Area in accordance with regulations of the Government of Andalusia (Law 2/1989) and the only protected area is the middle and upper area of Sierra de Mijas (CS-3 Mountain Complex in Sierra de Mijas), with an administrative figure of low relevance (Special Protection Plan for the Physical Environment of the province of Malaga - PEPMFM) and consequently of little legal weight. In recent years, the middle areas of S ª Mijas in the town of Torremolinos are occupied (above the Mediterranean highway) because from November 1996 the City Hall of Torremolinos requested the correction limit of the protected area and eliminated several protected areas.

Considering the areas or monuments included in the World Heritage List, we can not include any goods or area in this List, even if the College of Railway Orphans and the Tower Mill are declared goods of *cultural interest* (by the Council of Ministers in 1990). There are two traditional settlements, the Carihuela on the west, facing the beach, and El Calvario on a small hill in the centre of the town. The district of La Carihuela was the original fishing village, which had some own identity insignia; its name is not clear, and is attributed to the fact that the beach was covered by *carihuelas*, climber plants.

Before 1960, Carihuela consisted of two lined sidewalks of small one-floor houses and huts, always on, with some short alleys that would lead to the beach. In the second quarter of the century, La Carihuela came to have a large fleet of nearly forty vessels engaged in fishing for sardines and other species. Today, the neighborhood is much transformed, keeping little trace of the past, most popular architecture is gone, and the remaining part of the urban area consists of some already much rehabilitated houses. While fishing is now largely a thing of the past and fishermen converted to restaurants industry, it is the neighborhood with a high concentration of restaurants on the seafront, and this gives it some unique and attractive role.

El Calvario was the neighborhood of farmers and laborers who worked in the valley. The first homes, all one floor and with courtyard, were built at the edges of the slopes of the hill towards the road to the neighboring municipality, Benalmádena. The area was also famous for the wheat milling industry, and hence the name of the municipality, as there was a mill located in a tower. Today, the indigenous population still inhabits the area

Also important to highlight is the sensitivity to the *recycling* of waste, since it is the public administration response to the problems associated with the "metabolism" of the towns. *Municipal solid waste* indicator registers "0" value, as the current landfill does not have any kind of classification, let alone for solid waste recycling. It does not even have special containers for the different types of waste, being the only municipality in the province of Malaga that does not have this service, making it impossible for many homes and tourism accommodations to recycle their waste. However, it is important to know that the municipal landfill does not comply with current legislation, in fact it is classified as illegal dumping from January 29, 2010[28], which gives us an idea of the local government *response* to such a serious problem and the impacts it may cause; the illegal dump is located in Sierra de Mijas, which presents an environmental risk as it is located near an aquifer whose function is to supply water to the population not just in Torremolinos, Benalmádena but also in Alhaurin de la Torre.

[28] There is a final decision for closing the landfill, but currently it is still operational, as evidenced by the Provincial court of Environment of the Junta de Andalusia, which sent a report to the Law Courts, where enclosing photographs of trucks entering and coming out of the landfill.

Table 30: Main indicators regarding the political measures

Indicator	Value
Protected area by ecosystem type	1
Areas and monuments included in the list of *World Heritage*	0
Traditional settlements	2
Recycling capacity	0
Reused waste	Agua
Treated waste	0
Cover treatment plants	1
Quality beach	0
Environmental quality system	1
Renewable energy production	25%
Environmental monitoring system	0
Environmental Information Center	1
Number of NGOs	5*
Existence of a land planning and Management system	PGOU POTAUM

Source: Personal elaboration, data Blue Plan

As for the *reuse of wastewater*[29], there is a specialized treatment (treatment plant of secondary level) in the Guadalhorce Wastewatre Treatment Plant, located in the municipality of Malaga. The point is that the secondary treatment has little reuse, a portion of the treated water is released into the sea and the rest is used for cooling a power plant located within the province (Campanillas)[30]. However, considering the constant patches of waste at sea[31], it seems that the carrying capacity of this infrastructure has been exceeded during the high peak tourism season.

Another interesting indicator is the *quality of beaches*. Considering that one of the most widely used quality parameters are the blue flags, it is significant that no beach in Torremolinos has been able to achieve it since 2005, while the rest of the Malaga coastline has 19 beaches awarded in 2010. The local administration does not specify the reasons for its "non involvement" in recent calls, but we can interpret it that no international recognition was ensured.

In the field of renewable energy the advancements were more significant due to the importance of the wind and water power in the Spanish energy system. In Spain, 25% of the whole produced power in 2009 was derived from renewable energy (taking into account the global consumption). It is also important to highlight that 45% of the hotels on the Costa del Sol have solar heated installations[32]. These types of installations are mainly used for generating "hot running water", which, depending on the type of hotel, it supposes 30% of the energy consumption, that is 29% for the two star hotels, 31% for the three star hotels and 27% of the four star hotels.

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[29] This responsibility is of central administration of the Spanish state, namely the Ministry of Environment

[30] Today the power station has not started functioning because the electricity consumption has stagnated with the economic crisis

[31] Analyzed in the third Report

[32] According to the report on hotel energy sector in 2009, issued by SOPDE for the Association of Hotel Entrepreneurs of Costa del Sol (AHECOS)

As for *environmental monitoring systems,* there is no such system in place at municipal level. There are compulsory checks on the quality of drinking water, beach quality, environmental quality, air pollution and waste, but these controls are not part of a system that would relate these partial evaluations and, therefore, would help to take a decision starting from the constant and sustained evaluation of data.

As an Environmental Information Centre the complex "Cañada del Lobo" in the pine area has been included. This centre has a nature classroom with a training role, and contains educational material on environment and native species used for different workshops.

The civil society *responses* can be channelled in different ways; one is the existence of NGOs. This study has considered the NGOs with headquarters in Torremolinos and not just acting on their territory in one form or another. In this case, there are five NGOs mainly of social and religious character (Emaus Work of Love, Bread of Life, Organization of families and Alzheimer patients, ONO Animal Protector, Animal Park).

Finally, as discussed in the previous section, there are specific tools for *territorial planning*, such as General Urban Plan (PGOU) of the municipalities and the Territorial Plan of the Urban Agglomeration of Malaga (POTAUM), both discussed in the previous section.

As a general balance, the *response indicators* from public administration and private companies are clearly inadequate to the pressures and impacts of the destination. The policies implemented in Torremolinos at general level cannot be related to sustainability; although it is true that there has been an improvement in some indicators (waste water recycling, energy use, existing land use plans), however, most *response indicators* need improvement and this only depends on the vision and political will of the public and private actors. Of course that investment should increase and this is perhaps the "argument" for not implementing stricter measures and controls, but it seems contradictory to pressure the environment in order to obtain social and economic profitability, when the benefits of this exploitation are not engaged in improving the tourist destination under its environmental dimension. This contradiction, which is not only valid for the tourist destination of Torremolinos, Spain or the Mediterranean, is the clearest evidence of the lack of attention to the environment that still exists; nevertheless, the model leaves enough room for speculation and the rapid enrichment of some public and private actors which leads us to think that what is actually promoted is the "un-sustainability" of the system.

5. Conclusions and Proposals for improvement actions

After analyzing the "response" policies of the government and the private companies, the study conclusion is that almost all proposed or under implementation policies are generally positive because they tend to improve the sustainability of the destination studied, but are clearly insufficient.

Many of the proposed policy measures can improve the sustainability profile of Torremolinos and avoid negative environmental impacts. The closure of the illegal dumping site for solid waste from 1st of January 2011 represents an important advance because it avoids the danger of contamination of the aquifer of the Sierra Mijas and enables the recycling of waste for the entire population and especially for the hotel industry. Another positive aspect is the construction of 37 ecological islands (underground) for urban solid waste; no doubt that these will reduce the visual impact of multiple waste containers and improve the image and cleanliness of the streets, which can help give a picture of a better tourism destination to the final tourists. What is striking is that Torremolinos is the last town on the Costa del Sol that has this system of waste collection (budget €1.5 million, completion expected late 2010).

Other negative environmental impacts such as pollution of water from rivers and the sea by the lack of a wastewater treatment with more capacity are being resolved. The Andalusia government has publicly stated the creation of a new wastewater treatment plant (WWTP) in the north Guadalhorce, which will increase the treatment capacity. However, this is a problem that does not seem to end. For more than thirty years there has been a lack of infrastructure, resulting in the peak months of occupation and use during the peak summer season, the bathing water in the main beaches are not clean, making it impossible to swim in the sea and seriously damaging the international image of the destination. The explanation is simple; the growth of population and housing is much higher than the growth of planned drainage infrastructure. The current economic crisis seems to delay the new facility.

As for energy, the greatest progress is the increase in renewable energy, but no reduction in consumption, despite the importance of the reduction for greater sustainability. The new "Technical Construction Code" adopted by the Central Government (Ministry of Housing) in 2006 obliges to install solar panels on any new construction, modification and / or renovation of facilities, offering specific grants and programs for hotels. Moreover, the production of renewable energy in Spain has been extraordinary in 2010, covering 35% of the electricity demand, which brings Spain to the European target. At the local level is important the initiative of the Metropolitan Mayors' Forum of the Metropolitan Area of Malaga, which provides a series of horizontal and vertical measures aimed at improving the sustainability of the energy model, namely: building energy management centers for public awareness and businesses, measures to reduce consumption at the level of public administration and public lighting...

Regarding the water consumption, there are no specific rules of consumption control, only the "progressive rate"; that is, the price increases as more is consumed. Law 9/2010 Water for Andalusia regulates it as mandatory, although the city of Torremolinos has been practicing this measure for years. The positive fact is that the intensive occupation urban model of Torremolinos involves a lower consume of power compared with other areas of the Costa del Sol. To this we must add that it is precisely the hotel entrepreneurs who have begun to invest more in reducing energy consumption and water because due to the cheapening of the costs that this supposes.

Finally, with regard to the noise pollution - even if it's a complex issue to be a nightlife destination, with a significant number of nightclubs and bars – it has an effective policy in this regard, which needs to be better enforced and comply with the appropriate controls.

With regards to the tourism sector, there are different but not always effective measures intended to improve the tourist area of Torremolinos. With the decline of tourists, mainly British, substantial efforts in the past two years have been made to stimulate the Spanish demand. This conservative measure has maintained occupancy and visit levels, however, it has decreased tourist spending and, thus, the economic benefit per tourist. In the case of the hotels, the revenue decrease and the increase in the number of visitors mean that the benefits of this model begin to be questioned.

The constant measures to improve the quality of the hotels (support for the conversion of the Government of Andalusia) from the 90s had as a result the conversion of 2 and 3 star hotels to the 4 stars category. In this regard, although the improvement in the quality must be consistent and continuous in the accommodation sector, in the particular case of Torremolinos, it will be difficult on the medium and short term to position it in a high purchasing power segment, of exquisite quality, which would demand the existence of 5-star hotels. This is now impossible in Torremolinos, mainly because of the deterioration of its environment as well as the maturity of the destination, as it is currently positioned.

It is important to correlate this action with others of diversification in order to help build the image of the Costa del Sol on something more than the segment of "sun and beach". In the case of Torremolinos we will highlight the constant marketing campaigns for specific segments of high spending power (gay tourism, fairs and congresses), by product type (sports and social) or complementary activities to meet the demand (mainly cultural events). This diversification of products and attractions must take into account the complementary relationships between Torremolinos and Malaga, as the latter town has bet on facilities and cultural events (Picasso Museum, Centre for Contemporary Art, Thyssen Museum...) that does not seem to be taking advantage of as a complementary offer to its visitors.

The significant dependence on tour operators spurs the commitment to capture the customer directly and reducing the number of intermediaries, and no doubt that Internet is part of this new culture of tourism that focuses on the *Online* and *Social Marketing*. In this case it was the regional administration (Government of Andalusia), which has invested the most, creating a social network on the web site of Turismo Andaluz and a central reservation system. In this sense, we advise defining well the mechanisms for management and expenditure control that would determine the return on investment (ROI), especially given the easy nature of their applications in such communication systems and online marketing...

The different "responses" to the seasonality problem do not seem to give very good results for the moment, because for several years on nearly half of the hotels in Torremolinos get closed during the season.

In regard to gender differences, tourism has helped the incorporation of women into the labor market in recent years, although during the crisis women are most affected, having a higher job loss percentage.

Hopefully some of these measures will be successful and help mitigate the serious damage that is causing the economic crisis on employment, both in Torremolinos, and the total of the province of Málaga (28.3% for 3 rd quarter 2010) and the rest of Spain (19.8% 3 rd quarter 2010)....

Importantly, despite efforts to improve the profitability of tourism in the destination, there is a narrow, conservative vision of tourism development and planning which tries to solve the decline in competitiveness and profitability with the same old strategies: increased land use, artificiality and high urbanization of the territory. Easy to implement strategies that help increment the public treasury funds and energize the private sector, involve short-term profitability but convert into a territorial and tourism bottleneck in the short term.

We have been previously saying that the artificiality and urbanization of Torremolinos (and all the Costa del Sol) is the main problem of the tourism destination and, unfortunately, there is no forecast of growth control. In this sense, the crisis flatly stopped the construction on the Costa del Sol. For Torremolinos, the evolution of housing endorsed (approved for construction) passed from 1,646 homes in 2006 to only 14 homes in 2009, worse year ever (425 in 2007 and 515 in 2008[33]). During 2010, they begin to endorse 88 homes, a figure expected to increase significantly during 2011 with the final approval of the General Plan PGOU.

In this scenario encouraging further housing to diversify the city's activities and have a higher quality city can result in a contradictory, ambiguous and dangerous speech, since a further increase in supply, with the current situation and the large park of unsold homes, will lead to a further fall in prices. This behavior is similar and the overall implementation of the tourism sector, and will end up adversely affecting the quality of the destination, and reflected in a decline in tourism revenue. Furthermore, the artificiality of the soil has traditionally affected the protection of the environment and led to the reduction of the landscape quality; such an example is the decrease in the natural landscape of Sierra de Mijas in 1996, with the clear intention to build more homes above the Highway A-7.

There are other measures of the Spanish central government that can lead to significant negative impacts to the sea, its ecosystem and damage the image of the destination. There has been approved the search for methane gas in the Alboran Sea, about 10 km off the coast of Mijas (Costa del Sol). This measure can put at high risk the tourism industry, as any accidental spill would have incalculable consequences for the Costa del Sol, in addition to environmental and socio-economic impacts for the whole community.

In order to describe the strengths and weaknesses of each destination in terms of supply, demand, market organization, outcomes and impacts, as well as the opportunities and threats, we will use the SWOT analysis.

As a conclusion of this diagnosis, we elaborate the following SWOT analysis.

[33] Source: Arquitects College of Western Andalucia (Malaga).

Table 31: SWOT analysis for Torremolinos

INTERNAL ANALYSIS	
WEAKNESSES	
1.	Overcrowding and deterioration of the coast by the accelerated processes of urbanization that surpass the existing infrastructure
2.	Insufficient or inadequate response of the administrations to the needs spurred by the urban growth
3.	Dependence on the tourism and construction sectors
4.	Lack of political involvement in the sustainability of the area (reflected in the PGOU, POT, scarce implementation of the Agenda 21 Local)
5.	Insufficient environmental education programmes (deepening the knowledge of the environmental reality)
6.	Lack of a rigorous method in applying the law (land, environment, energy, water, coasts, …)
7.	Deficiencies in the Integral Sanitation and lack of cleanliness
8.	Growing seasonality in tourism
9.	Low degree of social cohesion (the case of immigrants in leisure and residential tourism)

INTERNAL ANALYSIS	
STRENGHTS	
1.	Mediterranean climate
2.	Biodiversity and Geodiversity (contrast mountain, sea)
3.	Acknowledgement and consolidation inside the metropolitan area
4.	Adequacy of the current situation to define the elaboration of a territorial model that would end the current model of urban occupation, and committed to integrity, rational and environmentally-friendly criteria.
5.	Excellent Geographic situation in the centre of the Costa del Sol and close to the International airport.
6.	Favourable conditions to redesign the accessibility model on the entire coast (railway corridor Málaga–Algeciras)
7.	Incorporate urban depurated residual waters as available hydro resources
8.	Quality of the hotel offer
9.	Brand image “Costa del Sol”
10.	Touristic experience and leadership
11.	Touristic Management of the destination starting with the Qualifica Consortium of the Western Costa del Sol (create joint tourism strategies)

EXTERNAL ANALYSIS	
THREATS	
1.	Urban speculation (housing, residential tourism, ...)
2.	Excess for the tourism demand with impact on the denaturalization of the physical and human environment
3.	Low awareness of the growing damage of using one's own vehicle for mobility reasons
4.	Climate change (rise of the sea level, drought,...)
5.	Sea waters contamination (spills in the high sea of waste...)
6.	Reduction in the European financing
7.	Competitive emerging destinations
8.	Hotel growth in disparity with the demand
9.	Important economic leakages and black economy

EXTERNAL ANALYSIS	
OPPORTUNITIES	
1.	Coordination of the different Public Administrations for the compliance with and foment of the environmental legislation
2.	Develop a tourism model less threatening for the limited local natural resources
3.	Value the immigration as a stimulating factor for social cohesion
4.	Relevant image in diverse aspects which transcends the region and the country, which is seen as a stimulus for redesigning the image of the territory
5.	Important demographic dimension (Costa del Sol) and socioeconomic profile favourable for undertaking an urbanistic development project on the entire coast, which would permit positive synergies in different fields
6.	Low-cost airlines
6.	Internet, new technologies in all processes
7.	The economic rise of countries such as United Kingdom and Germany in terms of the current crisis, as out bounding countries for the tourism of Torremolinos

Source: Strategic Plan of the Western Costa del Sol. Own elaboration

Finally, we present a series of **strategies and policies** to advance the sustainability of the destination of study that could serve as a reflection and recommendation guide for government and private businesses. Those strategies are structured into three types: measures affecting the supply and demand for tourism, land-related measures under the socio-economic and environmental aspects and, thirdly, measures related to sustainability under its three pillars.

1. Measures affecting the tourism supply and demand.

In order to help reduce seasonality and improve the level of tourist spending, the focus should be made on quality, not only of the hotel sector, but also on creating a more diverse and better complementary offer. The commitment for quality hotels (grants for the conversion of hotels offered by the Government of Andalusia) has been a positive but insufficient step. In this sense, although the improvement in quality must be consistent and continuous in the accommodation sector, in the case of Torremolinos it results difficult to position it in a high purchasing segment destination on the short-medium term. Currently, to achieve an increase in tourism revenue, steps must be taken directly in the complementary offer of the destination, as one of the most viable tools to increase revenues and improve the sustainability: conferences, fairs, culture, health, sports ... How to create and promote all this is a public and private topic and all efforts take into account the existing products in the destination Costa del Sol and focus on innovation.

The two products with the highest exit projection on the Costa del Sol are the golf and health segment; the former is overly complex for Torremolinos, but health tourism can be a highly profitable product.

To encourage diversification of the tourism product a "Costa del Sol" brand is required. Torremolinos should **strengthen relationships** with Malaga city and thus benefit from the great effort that the latter has made in recent years, creating a cultural offer (events, festivals, equipment...).

Besides, the creation of cultural tours and a calendar of leisure and cultural activities throughout the Costa del Sol, would enhance the complementarities of the offer.

These strategies would benefit positively the whole coast, although it is true that closer and connected cultural and leisure services should be defined, with the current demand for visitors to the Costa del Sol.

In the diversification projects, the participation of private businesses should be favoured.

As for the diversification of demand and the possibility of eliminating intermediaries, regional and supra-municipal investments are responsible for sectoral policies that seek to reduce dependency on tour operators (as it should be a policy that will not only affect Torremolinos but the entire Costa del Sol). One measure may be to obtain a more diversified marketing mix, and the direct marketing of the destination, which has more value and serves to bring us closer to the demand, satisfy and know it better, and increase our revenue without the need to increase the number of tourists.

To encourage the improvement of human capacities, especially for the hotel industry, a good way is to create and improve the complementary services offer, to improve direct marketing of the destination. This training would normally focus on enhancing the socio-cultural activities, which would complement the supply, as well as technical training on new methods of marketing and online promotion, which would have direct effect for the destination. These actions should be directed primarily towards the younger sector of the population, which is most affected by the unemployment figures.

2. Measures related to the territory under socio-economic and environmental aspects

It is important to promote local business initiatives that reduce economic leakage from the destination using "active employment policies". The creation of a "bank of ideas" for new innovative businesses must be accompanied by a financial program to support these initiatives.

To reduce economic leakage and reduce mobility problems (high energy consumption and pollution effects), measures could be stimulated for attracting the workers in Torremolinos to come and live in the town.

Fomenting the association and the dialogue round tables between public and private administrations is also fundamental.

Given the importance of the Sierra Mijas as a natural area and container of the most important aquifer of the Costa del Sol, an urgent reforestation plan is required that would also serve as a green lung of the city and help mitigate rising CO_2 (change climate).

3. Measures related to the environmental, economic and social sustainability

At present there are significant incentives to encourage tourism businesses to **save water** and **energy** and to implement **quality systems** (including environmental quality). If many companies do not subscribe to these measures is either because they are expecting that the incentives be greater or the water and energy saving and the quality is not part of their business goals. In this situation we propose two measures: one would be that these measures be financed with a larger budget and another one that tougher measures must be imposed by law (such as the Technical Building Code adopted in 2006) in the dialogue with the industry.

Two facts to consider in these times of crisis are that the private sector cannot be asked for a greater investment effort, however, we must remember that during the boom period of the sector (1998-2006), companies did not invest heavily in this subject; second, the tourism business structure in Torremolinos is predominantly small and medium sized enterprises, which ensue that the investment is very limited.

It is imperative that the bearer of water and energy saving should be the government, for this, the measure consists in the increase of renewable energy in buildings and government services, especially the city hall. This strategy makes sense at supra-municipal level (the destination Costa del Sol). In addition, further work is needed **to reduce water consumption and energy through awareness campaigns** to citizens and entrepreneurs; the best advertisement for this is that the government itself set an example in their facilities, because the "demonstration" effect adequately publicized encourages citizens and businesses.

On environmental protection legal measures there is a broad legal body, but any territory other than a "Natural Protected Area (under Law 2/1989 of the Government of Andalusia) may be at risk of experience an artificialization process. The POTAUM makes reference to the "undeveloped land", but it would be important to establish stronger local protection policy to avoid reducing the natural areas and biodiversity. In that sense it would be interesting to keep the last remaining unbuilt coastal area annexed to the protected area of the mouth of Guadalhorce river, and to maintain and increase the level of protection for the Sierra de Mijas.

The proposal does not designate another "protected natural area" because this can pervert the legal definition, that is, everything that is not Natural Protected Open Space is at risk of dealing with house building; instead, we propose that it should be the local policy that must have among its priorities the non-urbanization of each meter of soil, because imposing conservation measures from the region (Government of Andalusia) that the local administration (Torremolinos) should apply actually causes a conflict that hinders the dialogue between these public administrations.

Regarding the adequate quality of sea water, monitoring is guaranteed by the European and Spanish law[34], however, is striking because the city of Torremolinos does not want to apply the distinctive Blue Flag since 2005, especially with the high level of public equipment that all the beaches in the study area possess. Logically, the proposed measure is to apply for the Blue Flags

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[34] Directive 2006/7/CE of the European Parliament and the Council, 15th of February 2006, regarding the Management of the quality of the bathing Waters which was adopted by the Spanish law through the Real Decree 1341/2007, of 11th of October, on the management of the quality of the bathing water. (BOE nº 257, de 26/10/2007).

for all the beaches as in the tourist sector, this is a recognized distinctive for quality, accessible and well maintained beaches.

Another environmental impact which is legally controlled is the noise pollution, however, according to current data; there is no need for elaborating more laws, but full attention should be given to the compliance with the existing ones. Therefore, for the abusive night noise, measures are recommended to control and sanction companies or individuals who do not comply with and support entrepreneurs in the effort for acoustic conditioning of their locals.

The union of these proposals aimed at improving the local and global environment could lead to a Local Agenda 21, Torremolinos, and even LA21 of the Costa del Sol to be managed by the *Consortium Qualifica of the Western Costa del Sol* (supra-municipal tourism management agency). Along with the municipal or county LA21 a managing authority could be associated with the plan that would serve as the Permanent Observatory for Environment and Tourism, with the idea of realizing regular diagnosis and thus have a greater capacity for analysis and proposals; it is necessary that the tourism sector and the environment of the destinations are not antagonistic but complementary. Also, because of the low weight in the area of non-governmental organizations in tourism or environment, the LA21 could be a way to integrate the public (through the participatory process that it involves) and other land management agencies.

To be most effective, the proposed measures require **greater control over land use**; in particular, the **growth must be slowed down** and even to propose a moratorium on planning[35] for a few years in order to "rethink" the territorial-tourism model best suited on the long-term, at a more leisure pace.

These proposed measures must be framed in the current political reality that promotes the public sector at various levels, the private sector and the citizens, and within a short-to medium term vision. However, there are **other long-term measures** that would require a larger consensus (currently impossible, unattainable) and that raise the topic of **the change in the territorial and tourist area model** of Torremolinos and the Costa del Sol. This is the commitment to a Green Costa del Sol, an outpost of changes in society which would be built on two pillars: the transformation in a city with zero consumption of CO2 plus 100% renewable energy and new technologies. The change is profound, from promoting a **green mobility** (public and private), **CO2-neutral buildings, more space for pedestrians in the beach area and public spaces, bulking operations in central locations ...**

[35] Transitory period of one or more years without occupying more land and without building houses; this measure has already been adopted in mature tourism destinations such as the Balearic Islands, Lanzarote or Menorca.

Table 32: Measures for the sustainability in Torremolinos (summary)

1. Increment the complementary offer of the destination with new products (health and sports) and diversifying the actual offer (congresses, fairs, culture)
2. Tighten relationships with Málaga Capital
3. Create cultural tours and an agenda of leisure and cultural activities
4. Create a more diversified marketing mix. New technologies
5. Training in socio-cultural activities, new commercialization channels and online marketing
6. Create a “bank of ideas” for local entrepreneurial initiatives
7. Promote the administrative assignment/registration for the workers in Torremolinos
8. Foment the association among entrepreneurs
9. Create dialogue tables between public administrations and private entities
10. Create a reforestation plan for the Sierra Mijas
11. Promote water and energy saving
12. Impulse the tourism and environmental quality systems
13. Increase the renewable energy in the buildings and the public administration services
14. Reduce the water and energy consumption through awareness campaign
15. Protect the environment (on a voluntary basis, without elaborating new laws)
16. Apply for the Blue Flags for the beaches
17. Local Agenda 21 of Torremolinos and/or Western Costa del Sol
18. Permanent Observatory of Tourism and Environment
19. Major control of the land occupation (diminish the growth and / or urban moratorium)

These changes are not immediate, it would be a 20-to-30 year plan and focused on zones to find the "demonstration effect", that is, the rehabilitation of an area showing little by little that the project is viable and has the consensus of all parts (private and public).

These measures are not a utopia, and are already experiencing in other places that want to be at the forefront of tourism and sustainability in the twenty-first century; in Playa de Palma (Balearic Islands), the private and public sector have prompted these measures with the Palm Beach Integral Reconversion Plan[36]. The idea is that following the trends of the twentieth century in the twenty-first century is not a winning bet on the medium and long term, neither in tourism, nor in the sustainability of a territory.

[36] See http://consorcioplayadepalms.es/

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