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Peaks and Troughs from Tourism in the Ionian Islands, Greece

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Peaks and Troughs from Tourism in the Ionian Islands (Greece)¹

Lead

This Paper refers to the spatial planning problems, caused by tourist activity in the Ionian Islands characterized by strong seasonality. Emphasis is given to the ways of overcoming underutilization of infrastructures in order to achieve sustainable local development. The interest of this approach, especially for city and regional planners, lies on the importance of tourist activity in fragile island areas of Mediterranean and consequently on planning methods used to solve problems related to the carrying capacity of existing natural and human ecosystems and to the construction of appropriate infrastructures in a 'pulsar' context.

1. Introduction

The Ionian islands (Greece) are experiencing dramatic pressures from tourism, after a long period of socio-economic decline and abandonment due to out migration in the fifties, sixties and seventies. Tourism has provided with unique opportunities for development influencing several branches of the economy, the local societies and environmental resources. However, tourism is also characterized by strong seasonality which influences the performance of the island human and natural ecosystems with overloading of space, infrastructure and services in the summer and underutilization in the rest of the year. Such fluctuations affect the design and raise the costs and undermine the feasibility of construction and maintenance of basic infrastructure and services. This has been a "headache" for local and national planning administrations. Nevertheless, in the last decade or so, broader changes in tourism patterns and access to higher order services at the local level –because of tourism- have resulted in multiple benefits for local societies reducing the risks and uncertainties of peaks and troughs from tourist activities.

This paper, at a first step, presents the main (quantitative) characteristics and key features of the post-war evolution of tourism in the Ionian islands, by investigating tourist flows, in relation to the above mentioned "traditional" migratory movements, through official statistical data and available empirical studies. This investigation includes, *inter alia*, a comparison between the different island and administrative units of the Ionian Region in order to reveal the significant spatial differentiations of tourist development in the area during this period (1950-2000).

At a second stage, the paper proceeds to a more qualitative and critical analysis of the impact of these developments on local socio - economic structures, as well as on policies and projects related to tourism, to regional development and to the protection of natural and man made environment. In relation to the built environment of particular interest is urbanization particularly in coastal areas and the provision of appropriate technical infrastructure (such as for water supply and sewage) A particular attention is also paid to the role of technological progress and especially of the new maritime transportation means and networks operating in this region, influencing and transforming (through distribution of tourist movement in time and space) all kinds of commercial activity as well as islanders' rhythms of life in general (pulsar effect). Finally, there is an attempt for examining the role of innovation in informatics and telecommunications infrastructure and services on local development potential in an island "pulsar" context within a perspective of sustainable development.

2. The Basic Components of tourist development in the Ionian Islands

2.1. Tourist resources

The Ionian Islands group (comprising neither only four nor just seven major islands, as commonly believed, but also including 300 smaller ones!!) is known for its great variety of landscape, in which a dominant role is played by the lush vegetation and the geomorphology of the coastline the length of which represents roughly 8% of the entire country's coastline². Actually, the coastal zones constitutes the main pole of attraction and therefore the main tourist resource. Verdant coves, natural ports, and wide sandy beaches compose the coastal zone of each island, forming human scale landscapes which, in conjunction with the mild climate lend themselves to marine tourism. Cultural heritage and local cultural traditions have a corresponding significance (though not so much for foreign tourists, who are mainly interested in the natural beauties of the environment). In the Ionian Islands, the natural environment coexists harmoniously with historical monuments, traditional settlements and architectural heritage. The islands, particularly as to their civilization and culture, constitute an integral historical and cultural entity, linked by strong bonds deriving from their longstanding connections. They constitute one of the thirteen regions of Greece³, with Corfu as administrative center, and are in effect the locus of transition between Greece and Europe (a bridge). They are the line of contact with the other countries of the European Union, the sole geographical 'borders' of Greece with the new Europe.

The natural environment in particular is known for its rich fauna and flora, and also for the very good condition of its habitats and ecosystems (at least until now). In Zante there is a marine park, the habitat of the world-renowned turtle caretta-caretta, in Cephalonia the national park of Aenos, with a particular species of fir-tree (abies cephalonica) that derives its name from the island. Lagoons in Corfu and Levkas are of interest to environmentalists. Cephalonia, Ithaca, and Paxoi boast remarkable caves, still largely unexplored.

The man-made and cultural environment in the islands is very distinguished thanks to its special architectural character. All the islands have Venetian castles and fortresses, which serve as real poles of attraction for tourists, though they have not yet been fully restored and rehabilitated. There is also a number of appealing byzantine monuments and monasteries not only on the major inhabited islands but also on the small-uninhabited islets. Apart from the monument sites there is a fairly large number of museums (archaeological, byzantine, folklore) with remarkable collections and exhibits of all historical periods. Finally a number of religious, musical and culinary traditions are preserved and serve as the foundation for a variety of corresponding events.

In its present state, spatial organization fails to protect sufficiently, let alone utilize and enhance these tourist resources. Basic transport systems (sea and air) do not serve intraregional communication, being restricted, almost exclusively, to serving the connection with the center (Athens) and the coasts on the mainland lying across the islands. Since there are no fixed and dependable connections between the islands it is not possible to establish a tourist itinerary (tour) providing a comprehensive visit to all the islands: once can only visit each island separately. Seasonal connections between specific pairs of islands in the south lonian (Levkas – Cephalonia and Cephalonia – Zante) do not really alter the situation. Additionally there is still much to be desired in terms of port infrastructure, port organization and marina and berthing amenities.

2.2. Tourist flows in the Mediterranean, Greece and the Ionian Islands.

The Mediterranean has always been and still is the most important tourist zone (tourist destination) on the planet, not only in terms of tourist numbers and receipts but in other respects too. The 63% of Europeans prefer the Mediterranean coastal areas for their

vacation (European Commission 2001).Traditionally most of these tourists (mainly north Europeans and north Americans) head for the western part of the Mediterranean basin (Beriatos 1999). In the past two decades, however, with world and Mediterranean tourism having more than doubled, there has been an increase in the flow to the East Mediterranean, and of course to Greece, where, at the dawn of the 21st century, the annual number of tourists has reached and exceeded the country's population (10 million plus). Indeed, throughout the post war era, with the exception of certain times of political turmoil (e.g. 1967, 1974) there is a manifest trend of ongoing growth in Greece, which is however accompanied by great spatial inequalities and marked temporal variances.

For the same period, tourist flows to the Ionian Islands are on an upward trend, albeit with some fluctuations, as observed in the table of recorded overnights during the past thirty years 1970-2000 (Table No 1)

Year	Foreign Tourists	%	Greek Tourists	%	Total
1971	908.761	77,3%	266.955	22,7%	1.175.716
1972	1.326.215	82,6%	280.202	17,4%	1.606.417
1973	1.058.893	79,1%	279.312	20,9%	1.338.205
1975	1.596.980	82,5%	338.803	17,5%	1.935.783
1976	2.045.724	83,6%	402.723	16,4%	2.448.447
1977	1.857.028	79,2%	487.247	20,8%	2.344.275
1978	2.720.629	86,3%	431.812	13,7%	3.152.441
1979	3.285.499	87,8%	456.482	12,2%	3.741.981
1980	3.363.297	87,3%	488.500	12,7%	3.851.797
1981	3.637.658	90,1%	401.892	9,9%	4.039.550
1982	3.252.418	86,0%	527.565	14,0%	3.779.983
1983	2.935.632	85,9%	483.458	14,1%	3.419.090
1984	3.628.236	86,3%	574.509	13,7%	4.202.745
1985	3.886.532	87,7%	546.984	12,3%	4.433.516
1986	4.293.231	89,6%	499.865	10,4%	4.793.096
1987	4.174.476	89,4%	497.254	10,6%	4.671.730
1988	3.690.979	87,7%	517.119	12,3%	4.208.098
1989	3.299.127	84,0%	627.020	16,0%	3.926.147
1990	3.485.383	85,1%	610.794	14,9%	4.096.177
1991	3.374.851	82,8%	702.574	17,2%	4.077.425
1992	3.935.127	85,7%	658.715	14,3%	4.593.842
1993	3.589.862	84,7%	647.345	15,3%	4.237.207
1994	3.890.956	84,7%	704.643	15,3%	4.595.599
1995	3.923.891	85,3%	678.249	14,7%	4.602.140
1996	3.134.372	79,4%	811.616	20,6%	3.945.988
1997	3.754.300	82,3%	805.233	17,7%	4.559.533
1998	5.049.910	85,3%	868.295	14,7%	5.918.205
1999	5.409.130	85,0%	951.355	15,0%	6.360.485

 Table No 1. Tourist Overnights * in the Ionian Islands (1971-1999)

Source: GNTO, GNSS * All kinds of tourist accommodation except campings

It should be noted that Corfu, which has for a long time been an important tourist pole of attraction for Greece, causes a great intra-regional imbalance in the spatial distribution of tourist flows. In 1990, for instance, 72% of the overnights in the region where in Corfu. This percentage has dropped over the past decade, however, and in 1998 fell to 60%. During the same period Zante (the second tourist power of the region) has increased its share from 11% to 30%! There is therefore a notable trend towards balancing out the geographical

distribution of tourists within the region, a trend that is not occasional but structural, caused by Corfu's saturation as a tourist destination, and by the development of new tourist resorts.

As to the temporal distribution of tourist flows (over twelvemonth periods) there are notable fluctuations in the Ionian Islands, just as throughout the country, while July and August peaks are, if anything, steeper than elsewhere, naturally causing severe problems to tourist development (pulsar effect). Seasonality is less marked among Greeks than among foreigners. It would also seem that both categories of tourists (Greeks and foreigners) are contributing to dampening the phenomenon (reduction of July – August peaks) compared with former years. The new trend does seem to reflect an improved distribution of tourist flows throughout the six months of the summer (tourist) season, but now there is a more marked difference with the months of the winter season, resulting in a sharper break between the two periods (table No 7).

Foreign tourists prefer airplanes while Greek tourists prefer boats (car-ferries) as their chief means of transport to their destination. Islands, apart from the connection with Athens also have direct charter air links with cities abroad (organized tourism). It is chiefly through chartered flights that the major part of foreign tourist flows arrive in Greece. Specifically, 80% of tourists to the Ionian Islands arrive on chartered flights. Headcounts at the gates of entry (airports and seaports) bear out this general trend for growth in the four major islands over the past twenty years. (Table No 2)

Year	Zante	Corfu	Cephalonia	Levkas (Aktion)	Total
1982	7.092	406.938	10.283	11.415	435.728
1983	21.660	377.385	8.849	10.399	418.293
1984	22.212	408.045	11.127	11.135	452.519
1985	39.137	529.684	24.906	12.888	606.615
1986	61.260	627.772	30.410	20.095	739.537
1987	76.475	743.280	41.590	21.082	882.427
1988	105.333	680.995	58.454	26.949	871.731
1989	113.566	570.123	50.338	27.140	761.167
1990	139.513	712.608	56.065	51.467	959.653
1991	165.147	640.763	51.771	45.543	903.224
1992	206.777	735.145	70.711	74.519	1.087.152
1993	190.912	733.220	84.003	70.164	1.078.299
1994	241.846	816.375	103.782	84.421	1.246.424
1995	278.731	791.741	107.030	112.016	1.289.518
1996	245.367	640.274	86.176	99.007	1.070.824
1997	275.203	685.525	71.448	107.035	1.139.211
1998	325.009	796.489	88.814	127.054	1.337.366
1999	388.050	898.352	120.411	113.988	1.520.801

Table No 2. Tourist Arrivals by Plane in Zante, Corfu, Cephalonia, Leukade

Source: GNTO, GNSS

With respect to seaport arrivals, where there is a similar growing trend, just by way of indication, we might mention that in Corfu arrivals of foreigners for the years 1996 and 1999 amounted to 31420 and 45133 passengers respectively.

Turning now to nationalities, the British traditionally dominate the scene (by about 50% of the total) while recently there has been a marked growth in the percentage of Germans and Austrians. Furthermore there is an increase in the number of tourists who come from oriental countries (e.g. Japan). Of course European tourists make up the overwhelming majority of

foreign tourists at 90% of total flows, while Britons and Germans alone represent 75% of the total. In a comparison between the Ionian Islands, we find that Cephalonia, in contrast to the other islands, receives Britons almost exclusively. As a general comment, one might say that the share of foreigners among the total number of tourists coming to the region is significant especially on account of Corfu, where nights spent by foreigners exceed 90%. Specifically the percentage of overnights by foreigners in the Ionian Islands is greater than the respective figure nationwide (85% in the Ionian Islands vis-à-vis 75% nationwide in 1995). Furthermore, in the period of the past 30 years there is stabilization or a rather slight growth in the overnights by foreigners (82% in 1975 and 85% in 1999).

2.3 Tourist infrastructure and services

An initial fundamental observation is that, particularly as regards tourist infrastructure (i.e. tourist supply that will satisfy the demand resulting from the tourist flows previously mentioned), the situation is different for every island or prefecture in the region. This difference is particularly blatant between Corfu and the other islands, which appear in the role of 'poor relatives' in tourist development. The causes of this situation can be traced to the particular historical development of each island within the region, and particularly to how tourism spread relative to the attitudes and occupations of local inhabitants during the initial stages of post-war development.

Within this context of unbalanced development Corfu had already become an identifiable tourist destination by the early '50s (incipient phase of Greek tourism) and soon came to be known as one of the three or four booming tourist resorts in the country along with Rhodes, Crete and Athens. The path of mass-tourism would be followed by Zante a great deal later, and then by Cephalonia and Levkas. The fact that in 1980 Corfu had roughly 18,000 hotel beds out of a total of 23,000 within the entire region is quite characteristic; Zante, the runner up, had just about 2,500 in that same year. Naturally hotel bed growth rates in the other islands show up as much stronger, given that these are in fact unsaturated tourist zones compared to Corfu. Thus, within a 15 year span (1980-1995), the number of officially registered hotel beds multiplies twofold in Corfu, reaching about 36,000, threefold in Cephalonia, fourfold in Zante, and sixfold in Levkas. Nevertheless, since the late '80s, there is a drop in the number of hotels being built (due to the high cost involved) and a turn to secondary accommodation offerings, which provide substantially more beds than hotels do (taken as a total, and individually per island).

In view of these circumstances, the distribution (by Island district) of the existing tourist accommodation capacity (in beds) is reflected in table No 3 and graphic No 1.

Island district	In ho	In hotels*		ed rooms**
	Beds	%	Beds	%
Corfu	40.906	61%	55.568	62,25%
Leukade	3.375	5%	16.570	18,56%
Cephalonia	6.733	10%	9.594	10,75%
Zante	16.459	24%	7.534	8,44%
Total	67.473	100%	89.266	100%

Source: GNSS, * (2001), **(1995)



Graphic No 1.: Distribution of Tourist Beds in the Ionian Islands

At this point it should be noted that apart from the legally registered (rented) rooms, there are also illegal ('undeclared') rooms which amount to about 50% of registered rooms! Therefore, when these are also brought into the calculation, the number of beds in secondary accommodation rises to twice that of hotel beds. The development of such accommodation occurred at an astounding scale on account of low construction costs, modest initial outlays, and very high return on investment rates. However, rented rooms, despite their acknowledged advantages (sizeable improvement of income levels for inhabitants of the countryside and rural areas, flexibility, etc.) are greatly to blame for the increasing deterioration of the natural and historical environment.

In correlating tourist infrastructure with annual tourist flows we obtain what is known as Annual Average Occupancy, a significant indicator of tourist resort viability. It is worth noting that, in recent years (1996-1999), occupancy levels have risen in all the islands (table No 4).

Island districts		١	(ear		Change %			
	1996	1997	1998	1999	97/96	98/97	99/98	
Corfu	62,27%	69,21%	76,61%	77,78%	6,94	7,4	1,17	
Leukade	47,11%	61,60%	58,24%	62,44%	14,48	-3,36	4,2	
Cephalonia	49,46%	45,49%	53,99%	56,06%	-3,98	8,51	2,07	
Zante	61,29%	68,23%	83,79%	83,57%	6,93	15,56	-0,22	
Total	60,20%	66,15%	75,68%	76,43%	5,95	9,53	0,75	

Table No 4.	Annual Average	Occupancy in	h Hotels (b	y Island District)
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Source: GNTO, GNSS

3. Consequences of the unequal distribution of tourist flows and activities in space and time (pulsar effect)

When the growth of tourism is anarchic and uncontrolled (in terms of both quantity and quality), the situation soon becomes untenable: It is not only that infrastructure prove insufficient to deal with the importance of the tourist flow, providing totally inadequate services, there will also be an extremely adverse impact on fundamental tourist resources that are very difficult to replace (i.e. the environment) due to overexploitation, deterioration, and depletion (Cocossis H-Tsartas P 2001). The outcome is a vicious circle: Deficiencies in infrastructure, leading to the destruction of the natural and cultural environment, leading to reduced attractiveness and demand, leading to a drop in prices, leading to the arrival of crowds of low income tourists lacking any cultural sensibilities and interests, leading to the further deterioration of the environment, leading to a further drop in prices, and so forth.

Immense harm to the environment and to the vulnerable island landscape is caused in particular by building along the roads and along the coastline. Such locations sustain the greatest pressures from tourism. On the coastal zones, linear development imposes too heavy a burden on the ecosystem, which is, after all, the main tourist resource of the islands. There are many places on the coastal zones that display symptoms of saturation and overdevelopment. This is true not only of Corfu but also of the less developed islands such as Levkas and Cephalonia, where, due to an over concentration of tourist activities in certain locations, saturation phenomena are to be observed (Patelis J 1998).

Another crucial set of problems is posed as a consequence of the sheer inadequacy of infrastructures that could enhance and promote healthy living conditions, guality of life, and environmental protection. Chief among these problems, in most residential areas, is the water supply, which being both scant and poor in quality, fails to satisfy mounting needs during the tourist season, resulting in a spate of complaints from Greek vacationers as well as travel agencies and tour operators on behalf of their foreign clients. Adequate water supply during the tourist season is a permanent 'headache' for local authorities in the islands, and they have found themselves unable to address it satisfactorily once and for all. Hence. during the implementation phase of the 3rd Community Support Framework (2000-2006), this issue has lost none of its importance and urgency. A similar problem is also manifest in respect of sewage networks and Waste Water Treatment Plants. Infrastructure in this sector hardly suffice to meet the needs of the permanent (winter) population. With the exception of the main towns in the major islands, all other residential areas have no sewage networks to speak of, let alone any in proper working order. Yet there are hardly any complaints by way of early warning, for the problem is not immediately perceived at hotel service provision level, given that it does not involve a vital amenity (e.g. water supply) that tourists would need to use. It is only once environmental pollution from wastewaters has spread and become noticeable, that efforts are made to address the problem. With respect to solid waste, the absence of necessary infrastructure, as well as the poor organization and management, mean it is difficult to provide service that can meet the increased demands of the tourist season adequately.

Less important inefficiencies and malfunctions, due to seasonal population fluctuations, are evident in the sector of telecommunication infrastructure (telephones, television etc.) Their very nature makes them easier and less costly to develop. Yet there is a certain concern in respect of modernizing networks and increasing their capacity, to render the development of tele-informatics applications and Internet use, problem free during peak periods.

A quantitative assessment of the spatial and environmental impact of tourist activity related to the region's carrying capacity is the number of beds in relation to overall area and population. On the strength of available data (table No. 5) it seems that there is a dense concentration of beds in Corfu and Zante, while this indicator is clearly much lower (by 1/3 to 1/10) in Cephalonia and Levkas. Naturally, such high concentrations have an adverse impact on the natural and cultural environment, that are detrimental to society.

Islands district	Hotel beds / KM2	Hotel beds / KM2	Çïtel beds / 1000 inh
	1995	2001	2001
Corfu	56,7	63,8	360,5
Zante	27	40,5	425,5
Cephalonia	5,97	7,4	170,1
Leukade	6,2	9,5	149,8
Average I.Islands	23,8	29,2	314,9

Table No 5. Impact of Tourist Infrastructure on the Environment

Source: GNTO, GNSS

Tourist activity in Ionian Islands, as well in the whole Greece, is sharply seasonal. The moot question arising from uneven distribution in time (seasonality) is whether this phenomenon is likely to intensify or abate, in order that it may be addressed appropriately. Statistical data and assessments of a more qualitative slant acknowledge that in recent years we have been witnessing the emergence of new models for tourist development, especially in the islands. For example, there are people originating from the islands who now visit them not only during their summer vacations but also for the Christmas and Easter holidays. In fact lately such visits have become still more frequent, on the occasion of festivals and/or holidays, which are combined with the weekend and provide ample time (three to five days) for a mini vacation trip. Finally there are those (usually retired or wealthy people) who, originating from the islands, choose to spend the winter in Athens and move to the islands for the entire summer (May to October). As a general remark, in all the islands an extension (lengthening) of the tourist season is observed, ranging from April to October for Corfu and from May to September for the other islands.⁴

This development is attributed both to improved incomes and to technological progress in sea and air transport together with telecommunications. The result of these changes is reflected in how the duration of the trip from the center (Athens) to the islands has been shortened, especially thanks to high-speed car-ferries. These new conditions chiefly benefit Greek tourists (regardless of whether they originally hail from the Ionian Islands), given that foreigners are almost exclusively served by chartered flights. Indeed this flow of internal tourism contributes significantly to reducing tourist flow peaks and overall seasonality. Thus in Greek tourist flows, apart from an absolute 'maximum' (in August) we have other relatively lower 'peaks' throughout the year, which is not the case in foreign tourist flows. Furthermore, regarding foreign flows the improvement of the distribution is achieved only within the six month tourist season with all the months tending to equalize, while outside the season the flows are almost at zero level (table No 6 and graphic No 2). In other words the Greek tourist curve shows more than one peaks, while the foreign tourist curve shows only one.

		J	F	М	Α	М	J	J	Α	S	0	Ν	D
	Greeks	1,9	2,2	3,1	12,4	10,4	9,0	18,3	24,9	9,8	4,3	1,7	1,9
	Foreigners	0,0	0,0	0,1	0,6	12,5	17,3	21,0	22,6	18,4	7,4	0,0	0,0
1994	Total	0,3	0,4	0,5	2,3	12,2	16,1	20,6	22,9	17,1	6,9	0,3	0,3
	Greeks	2,2	2,2	2,7	17,1	7,0	7,0	16,6	27,4	9,8	4,0	2,2	1,8
	Foreigners	0,0	0,0	0,1	1,1	13,3	18,7	20,7	21,3	17,8	6,8	0,1	0,1
1995	Total	0,4	0,4	0,5	3,5	12,3	17,0	20,1	22,2	16,6	6,4	0,4	0,3
	Greeks	1,5	1,9	2,6	11,2	4,7	7,6	20,2	33,9	9,3	4,1	1,6	1,5
	Foreigners	0,0	0,0	0,1	0,9	12,1	17,7	18,9	23,7	19,0	7,4	0,0	0,0
1996	Total	0,3	0,4	0,6	3,0	10,6	15,6	19,1	25,8	17,0	6,8	0,3	0,3
	Greeks	1,2	1,9	2,4	11,5	5,4	7,4	19,4	33,7	9,0	3,4	2,5	2,1
	Foreigners	0,0	0,0	0,1	1,7	12,0	16,2	19,3	24,9	19,3	6,4	0,0	0,0
1997	Total	0,2	0,4	0,5	3,4	10,8	14,6	19,3	26,4	17,5	5,9	0,5	0,4
	Greeks	1,7	2,2	2,0	9,6	5,0	8,4	21,1	31,6	10,3	3,6	2,7	1,8
	Foreigners	0,0	0,0	0,1	1,4	12,2	17,4	20,0	23,5	18,3	7,0	0,0	0,0
1998	Total	0,3	0,3	0,3	2,6	11,1	16,0	20,2	24,7	17,2	6,5	0,4	0,3
	Greeks	2,3	2,4	3,3	10,7	7,2	7,8	20,8	28,8	9,0	3,8	2,3	1,6
	Foreigners	0,0	0,0	0,1	0,7	11,6	17,9	20,9	22,5	18,7	7,5	0,1	0,0
1999	Total	0,4	0,4	0,5	2,1	11,0	16,4	20,9	23,4	17,3	7,0	0,4	0,3

 Table No 6.Seasonality of tourism in the Ionian Islands (Overnights by month)* 1994-1999

Source: GNSS * Overnights in all kinds of accommodation except campings

Graphic No 2: Seasonality of tourism in the Ionian Islands (1994-1999)











An other important remark is that Ionian Islands, along with Crete and South Aegean Islands are the top three regions regarding the absolute number of tourists and the share of foreign tourists in total tourist flow. Actually, in these regions, foreign tourists outnumber by far greek tourists. As a result the "intensity of tourism" (which is an indicator measuring the number of total tourist overnights per 1000 inhabitants of the region concerned) is the highest of all regions. For this reason and because of the small population size the impact of tourisme (expressed by the above mentioned indicator) is much more pronounced in these island regions (Table No 7).

	Total tourist overnights (TOs)		Foreign Tourist Overnights	Intensity of tourism	
				(Number of TOs	
Region	(Number)	(%)	(As % of TOs)	per 1000 inhabitants)	
Eastern Macedonia and Thrace	1.448.496	2,7	33,6		
Central Macedonia	4.514.708	8,5	62,6	3600	
Western Macedonia	401.634	0,8	12,1		
Epirus	824.999	1,5	30,4	2400	
Thessalia	1.649.769	3,1	34,7	2200	
Ionian Islands	4.559.537	8,5	82,3	23500	
Western Greece	1.157.260	2,2	39,4		
Sterea Ellas	1.454.577	2,7	39,1		
Attica	7.425.570	13,9	65,1	700	
Peloponnesus	2.079.360	3,9	49,0	1900	
Northern Aegean	1.744.771	3,3	73,0	16600	
Southern Aegean	14.607.958	27,4	90,9	41500	
Crete	11.495.868	21,5	92,4	21300	
Total	53.364.507	100,0	74,9	5201	

Table No 7. Tourist overnights, by region, in 1997

Source: OECD (2000)

4. Conclusions and suggestions

It is evident that the precipitous growth and spread of international tourism of the past two decades could not by-pass Greece, particularly its less developed and unsaturated areas. The growth of tourism in Greece was, in a certain sense, regarded as a natural 'necessity', a demand of the times, proportional to the emigration of the labor force in the early post war era. Actually, it was the outcome of concerted policy making. In terms of social and economic reality, present-day tourism operates strictly on commercial considerations (Beriatos 1981). Within this context, Greece resolved years ago to enter the competition in order to grab a sizeable share of East Mediterranean tourism, by capitalizing on the so-called 'cult of sun' of westerns. From this point of view the Ionian Islands constitute a real 'geographical laboratory' in which we can explore and examine 'in vivo' the evolution and problems of contemporary tourist development (Beriatos 1999). Actually in this region tourist activity plays a primary role in local economy⁵ although with a serious impact to the environment and local society structures.

In view of these considerations, the fundamental goal and main objective of tourism planning efforts in recent years is the reduction of seasonal peaks. The attenuation of the peaks is extremely difficult especially for tourism, because it is the sole activity whose product (i.e. the use and 'enjoyment' of the natural and cultural environment) is consumed on location. To this purpose, alongside overall social changes and developments, we have seen the deployment of certain practices and methods, which constitute some of the available flexible solutions and contribute to the attainment of a reduction of high concentrations of tourist activity in space and time as follows:

- a. Promoting the unexplored hinterland of tourist resorts. In island regions with extensive coastal zones, such as the Ionian Islands, it is needful and feasible to channel coastal tourism towards the island interior thus making the most of alternative natural and cultural resources (mountain areas, natural habitats, forests, monuments, archaeological sites, etc.) Practically all tourist activity at present occurs within a belt ranging in width from half to a maximum of one kilometer from the waterfront. As a result the full range of the opportunities of these tourist regions are not utilized. There are mountainous areas of remarkable beauty in the Ionian Islands, which tourists never visit⁶. Introducing such a strategy would increase the carrying capacity of island regions and reduce pressures on the coastal zone throughout critical seasonal peaks.
- b. Abandoning the 'triple S' (Sea, Sun, Sand) tourist model as far as possible, and compensating by efforts to effect a turn towards the distinguishing cultural features of the areas concerned, this having been the dominant practice prior to the appearance of post-war mass tourism. It should be noted at this point that this trend, after a lengthy stretch of 'materialist' tourism, is effecting a very strong comeback under new terms (especially noticeable in the past decade). The significance of this cultural trend in achieving the attenuation of seasonal peaks becomes evident, once the main motive (culture) ceases to depend on seasonal considerations as manifested in 'triple S' model which, at least for the Mediterranean, relies for its existence on a specific season in the year, namely the summer. Therefore the differentiation of the tourist product in the lonians should not focus on the natural environment; it should focus instead on the cultural environment (including heritage, tradition, landscape etc), which happens to be the islands' main comparative advantage, and is linked to the specific identity of the region⁷.
- c. The construction of infrastructures that can be used outside the tourist season, for instance by changing the use of the building complexes in question (construction of multi-functional buildings). For infrastructure other than buildings, which are chiefly of a public character, another more complex strategy is required which will lend emphasis to an ongoing collaboration between the various stakeholders. Because, in the case of tourism or other seasonal activities of a similar nature, the adaptation of infrastructure

for alternative uses, outside the tourist season, requires continual and repeated modifications each year. Conversely in the case of big events (Olympic Games, international trade fairs etc.) such modifications are effected just once, upon the conclusion of the big event, which is a relatively easier task. An alternative that might be implemented under certain circumstances is the building of temporary constructions that need to be available only during peak period and can then be stored until required for use in the following year (e.g. for some coastal zones with sensitive/vulnerable landscapes it is preferable to use temporary constructions and equipment as amenities for bathers, than permanent structures that could cause irreversible damage to the coastal ecosystem.

- d. The proper use of secondary accommodation. As already mentioned, this form d tourism has been found at fault and is being blamed for the deterioration of the environment and tourist services provided. Indeed, shoddy constructions, both in terms of architecture and esthetic, and the unprofessional management of such businesses result in unacceptably poor quality service. On the other hand, rented rooms, which constitute a great part of tourist accommodation infrastructure, can absorb a great deal of pressure and satisfy increased demand during peak periods without requiring much by way of investment. This of course cannot be accomplished everywhere, nor should it be permitted in the anarchic fashion now prevalent as a result of the ruthless struggle between hoteliers and secondary accommodation owners. Nonetheless, it remains as a viable option in certain rural areas, or traditional settlements (using existing historic buildings), since it is thereby possible to prevent harm to the built and natural environment of the areas in question. For that matter, such is the rationale behind the relevant programs, projects and initiatives in agrotourism and ecotourism that are being promoted by the European Union, e.g. LEADER initiative community, which aims to achieve sustainable forms of tourism and development in rural areas.
- e. The introduction of information technology in the contemporary information society. As stated earlier, due to the nature of the tourist product, the role of information technology in reducing the impact of peaks is not immediately apparent. In other types of services, such as e-commerce, the direct influence is evident. Therefore what is called for is a deeper investigation as to the manner in which the use of these new tools will contribute to the achievement of the goals of modern tourist development. Certainly the improvement of spatial organization and environmental management, and also the enhancement of business undertakings and activities will influence significantly -albeit indirectly- the improvement of tourist activities.

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Notes

¹The personal involvement of the author in this subject is that he has elaborated a research on rural exodus and tourism in the Ionian Islands. He has also participated in the elaboration of various research projects and studies concerning regional development, spatial planning and environmental protection in relation to tourist activities in the Ionian islands. Member (for two years) of the regional council of the Ionian Islands.

² Coastline lengths (km) per island: Cephalonia 254, Corfu 217, Zante 123, Levkas 117, Ithaca 101, Paxoi 46, Meganisi 46, Kalamos 30, Schiza 21, Othonoi 17, etc.

³The region comprises four prefectures, which include a) the four major islands Corfu, Cephalonia, Zante, Levkas b) eight smaller inhabited islands c) the remaining, 300 uninhabited small islands and islets.

⁴ Tourist season extension is the spreading of a given number of tourists within a given year, and, consequently, the greater spread of the resulting tourist activity in as great a period of time as possible.

⁵It must be noticed here that, as a percentage of GDP, the primary sector dwindled from 26% in 1981 to 17% in 1994, while the tertiary sector (services, including tourism) grew from 51% in 1981 to 69% in 1994.

⁶ The European Union sponsors transnational programs especially geared to mountainous areas. These programs, which are in the framework of CSF, provide for the promotion of mild and environmentally friendly tourist activities e.g. ecotourism etc.

⁷ For example a unique element of historical and cultural heritage (intangible value) for the Ionian Islands region is the world famous myth of the Odysseus' homecoming to Ithaca, which has yet to be promoted as it is deserves.