

## **Evaluation of Tourism Development in the National Parks of Spain**

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### **Abstract**

*Tourism in Spain has been traditionally one of the most important sectors for the economy of the country, even being at present time the only sector in growth inside the context of the current economic crisis. Though traditionally tourism in Spain has been linked with the sun and the beach, the new demands of the national and international tourists are generating a greater movement towards other forms of tourism, especially the ones that presents environmental values, which has originated an increase in the number of visits to the National Parks in Spain during the last years. Along the present article, the evolution of tourism will be analyzed in the set of the Spanish National Parks, and the importance of these as development vectors inside the areas of territorial influence where they are located, and also the possible negative impacts derived from the increase of the tourist activity.*

**Keywords:** Tourism, National Parks, Development, Spain, Environment.

### **1. Introduction**

Tourism, a fast growing industry in world trade, contributes significantly to many economies. It is an important source of earning foreign exchanges and providing employment opportunities for domestic labor (Chao et al, 2012). With three hundred seventy millions of tourists' international arrivals, Europe represents more than 40% of the world total, a position that must remain according to the communiqué of the European Commission of 6/3/2010 (COM, 2010). According to this communiqué, the competitiveness of tourism is closely related to its sustainability, since the quality of tourist destinations strongly depends on its natural and cultural environment and on its integration in a local community. The sustainability of tourism includes many aspects: the responsible use of the natural resources, the consideration of the environmental impact of the activities, the use of "clean" energies, the protection of the heritage and the conservation of the natural and cultural integrity of the destinations, among others.

Along with this and according to the predictions for year 2012, tourism will turn into the "economic engine" of the European Union, due to the tourism preferences of the own Europeans. According to the results of the new Eurobarometer survey on the attitude of Europeans towards tourism, which also sheds light on the preferences and the way of travelling of the citizens of the EU, it has been disclosed that in year 2011 more citizens chose to remain in Europe to enjoy their vacations, and many more have stated that they have foreseen to do it in 2012 (European Commission, 2012).

All this information is furthermore significant in the case of Spain, since it occupies the fourth world position for tourists' international arrivals, only overcome by France, The United States and China (UNWTO, 2011).

According to the information brought by the Institute of Tourism Studies of Spain, in years 2000 and 2010 Spain received an annual average of 88 million visitors, of which 60% were tourists and the rest hikers, according to the conventional classification. At the same time, between year 2004 and 2010 the average annual expense of tourists was approximately 48,300 million Euros, which supposed an average annual expense per tourist of 888 € for the above mentioned period (Cuadrado & Lopez, 2011).

These numbers reflect the fact that tourist activity has been one of the cornerstones of the Spanish economic development from the middle of last century, being at present a strategic activity for the whole of the Spanish economy. The contribution of the tourist demand has provided around 11% of the national GDP on average in the last 15 years, leading approximately to 12% of the total employment of the Spanish economy.

The Spanish tourism model in spite of its weight in the economy, demonstrates an increasing unsustainable character with clear symptoms of depletion, so the introduction of the basic principles of sustainability in the tourist product value chain is indispensable, as shown in the Spanish Tourism Plan Horizon 2020, elaborated by the government of Spain in year 2006. Because of this, Spain will need to develop new tourist offers, which will overcome the model exclusively based on sun and beach tourism. In the last decades, it has been possible to reach the aims of profitability as demand widely overcame the offer; nevertheless, at the end of the 20th century begins a period of stagnation, and it is necessary to address the possibility of a depletion of the sun and beach tourism. Priestley (1995) identifies the principal problems of the tourist destinations in Spain, emphasizing the reduction of the cost-benefit ratio, the age and obsolescence of housings and the careless urban development, which resulted in the deterioration of beaches, coasts, natural areas and resources (Blázquez et al, 2011).

The sustained growth and spatial diffusion of tourism is a remarkable global phenomenon (Weaver, 2012). During the last years an increasing ecological conscience and a major degree of sensibility has taken place, opposite to the negative consequences of the unlimited exploitation of the natural resources that is producing an increasing tourist demand in the natural spaces, which stimulates the conservation of the above mentioned and of everything that can be offered to the visitor. Therefore, it's essential to support or improve the quality of the tourist destination's environment (Zhong et al, 2011). National park is widely used around the world and is the effective management model to protect the natural ecological environment (Yuewei et al, 2011).

## ***2. The Protected areas in Spain and the preferential place of the National Parks***

The International Union for Conservation of Nature defines a protected area as "an extension of land or sea specially dedicated to the protection and maintenance of the biological diversity and the associated natural and cultural resources, and managed by means of legal proceedings and other effective means". Therefore, the definition for protected area, suggests that the nature, which is inextricably associated to human presence, deserves a special attention for the values that it shows in certain spaces. Sometimes it emphasizes the natural ecosystems, in other cases the relation between human communities and the territory and in a few ones also the beauty of its landscapes. For all that, the name of "Protected Natural", frequently used in legislation, must be understood in a broad sense accommodating the natural, the cultural, and the aesthetic values. In addition, a protected area presupposes an adequate management of the public authorities in charge who have declared this condition, which will try to avoid new impacts that could alter these characteristics while the uses of these spaces are rationalized.

With the intention of recognizing the different uses that can be done in the protected spaces, the International Union for Conservation of Nature proposes a classification of the protected areas, according to the principal aim which motivates their protection, in six different categories, among which reserves and natural areas, national parks, natural monuments, habitat management areas, marine and terrestrial protected landscapes and protected areas with managed resources are included. As set out in table 1, the development of tourist-recreational activities is applicable to all the categories except category Ia that corresponds to the Nature Reserves in a strict sense-, whereas in half of them it constitutes the basic aim of its management (Riera & Ripoll, 2011).

**Table 1. Management Categories of Protected Areas according to the International Union for Conservation of Nature - IUCN - (\*)**

MANAGEMENT OBJECTIVES	CATEGORIES						
	Strict Nature Reserve	Wildlife Nature Reserve	National Park	Natural Monument	Management Area Habitat/species	Protected Marine/terrestrial landscape	Protected Area with Managed Resources
	Ia	Ib	II	III	IV	V	VI
Scientific Investigation	1	3	2	2	2	2	3
Protection of wildlife Areas	2	1	2	3	3	n.a.	2
Preservation of Biodiversity	1	2	1	1	1	2	1
Maintenance of environmental Services	2	1	1	n.a.	1	2	1
Protection of specific natural and cultural characteristics	n.a.	n.a.	2	1	3	1	3
Tourism and recreation	n.a.	2	1	1	3	1	3
Education	n.a.	n.a.	2	2	2	2	3
Sustainable use of natural ecosystems	n.a.	3	3	n.a.	2	2	1
Maintenance of cultural and traditional attributes	n.a.	n.a.	n.a.	n.a.	n.a.	1	2

Note: (\*) Hierarchical organization of the objectives as 1=primary objective; 2= secondary objectives; 3=potentially applicable objective; n.a. = non-applicable objective

Source: IUCN, 1994.

The socioeconomic purpose specially linked to the tourism inside the natural protected spaces has not been sufficiently studied in Spain. This happens because, traditionally, socioeconomic activities were considered to be incompatible with the protection and conservation functions of the natural heritage. It should be noted that any economic activity must be realized within a respect policy with the environment, this is, without damaging the resources and the ecosystems that sustain it. In this regard, natural protected spaces may appear as stimulating factors of new ways of development for the towns around the area of these areas. This development has to be respectful with the environment and the natural values that exist in it, promoting a tidy, harmonic and compatible use of the ones. This will result in a stable balance between the development of the communities of the area and the activities associated to conservation of the area. These assessments resulted in a qualitative change in the treatment of the protected natural spaces as the socioeconomic development, that far from being a threat for the conservation of the natural space can be compatible with all other purposes, and can even be considered as an essential element to guarantee the future of the natural protected spaces (Tolón & Lastra, 2008).

In the Spanish legislation, Law 42/2007, of December 13, 2007, for the Natural Heritage and the Biodiversity, defines the different protection figures of which four stand out as the most important: the Parks, the Nature Reserves, the Protected Landscapes, and the Natural Monuments.

The Parks are natural areas that, because of the beauty of their landscapes, the representativeness of their ecosystems or the uniqueness of their flora, fauna or geological diversity, including geomorphologic formations, possess a series of ecological, aesthetic, educational and scientific values whose conservation deserves a preferential attention.

In the park figure it is necessary to emphasize the National Parks, which are those natural spaces of high ecological and cultural importance, whose conservation is considered of general interest for the nation. There is a network of 14 National Parks in Spain which are a representation of the most valuable ecosystems of the whole territory and entail 6% of the protected area. The Nature Reserves are the natural spaces, whose creation has the purpose of protecting the ecosystems, communities or biological elements that because of their rareness, fragility, importance or uniqueness deserve a special evaluation. The Protected Landscapes are a part of the territory that the competent administrations, through the applicable planning, for its natural, aesthetic and cultural values, and according to the European Council's Landscape Agreement, consider to be worthy of a special protection.

The Natural Monuments are natural spaces or elements basically constituted by formations of remarkable singularity, rareness or beauty which deserve to be worthy of a special protection (various authors, 2008). The basic objective of every National Park in particular, and of the Network of Spanish National Parks in general, is to ensure the conservation of their natural values. The second objective of the Network of Spanish National Parks is to make conservation compatible with the use and enjoyment by of the citizens of the values contained in the parks (Red de PP.NN., 2012). This second objective makes the National Parks an engine for economic development, mainly linked to tourism.

**Table 2. Distribution of the Natural Spaces according to the protection figure**

	Natural Spaces	Thousands of protected hectares
Natural Park	157	3,707.96
National Park	14	347.08
Nature Reserve	280	169.50
Protected Landscape	54	150.10
Natural Monument	344	98.94
Other protection figures	835	2,470.50

Source: EUROPARC-Spain (2010).

The conservation and improvement of the environment, and its compatibility with a socioeconomic development model of the territory, undoubtedly constitutes a strategic factor in terms of improving the competitiveness of products and tourist local resources, as for example in what regards the increase of the life quality of the population. On the other hand, the environment and the good state of conservation of the natural resources, represents the fixed capital of any tourism initiative in the areas of economic influence of the protected spaces. Resulting in a difficult relation between the protection of the natural resources, and the increase of economic profitability (García & Sotelo, 2011).

According to the European Environment Agency, the natural spaces are increasingly fragmented by the development of urban areas and infrastructures. On the other hand, in the last two decades the surface of the natural protected spaces, as well as their number, has increased exponentially, turning Spain into the country which contributes with more protected surface to the Natura 2000 network (AEMA, 2010). In Spain, the protected spaces reach 27.7% of the total surface, according to the Natura 2000 network (Evaluación de los Ecosistemas del Milenio de España, 2011). The Natura 2000 network is an European network of biodiversity conservation areas, which consists of Special Areas of Conservation (SACs) designated according to the Habitat Directive -Directive 92/43/CEE-, as well as of Special Protection Areas for Birds (SPABs) established pursuant to the Birds Directive - Directive 2009/147/CE-. Its purpose is to ensure the long-term survival of Europe's most endangered species and habitat types, helping to stop biodiversity loss caused by the adverse impact of human activities. The establishment of the SPAs needs a processing policy beginning with the proposal of members states of Sites of Community Importance (SCIs), which, after its approval by the European Union, will be declared SPAs.

### ***3. Socioeconomic analysis of the tourist activities deriving from the National Parks in Spain***

The tourists and recreationists who are attracted to national parks create a basis for the development of nature-based tourism (Petäjistö et al, 2011). Economic benefits resulting from national park tourism offer a potential compensation to the local population, who has to bear the majority of indirect costs resulting from land use restrictions associated with the protection status of a particular area (Mayer et al, 2010).

As nature-based tourism grows, protected areas will witness increasing pressure from tourists, with the quality of destination attributes exerting a considerable influence over their experience (Deng et al, 2002). In many cases, the non-marketed benefits of the ecosystems are generally high and, sometimes, more valuable than the marketed ones. For example marketed and non-marketed economic values related to the forests of the Mediterranean countries like Spain. Timber and firewood (direct use and marketed value) are in general less than one third of the total economic value of the forests of every country, whereas the values related to non-timber forest products, recreational activities, protection of basins, capture of carbon and passive use (values that do not directly depend on the uses), imply between 25% and 96% of the total economic value of the forests (Wilson, 2006).

To these non-marketed benefits contribute, specially linked to the tourism activities among many others, the natural protected spaces. 73% of the Spanish territory over 1,500 meters is protected, contributing to the control of erosion and to water capture. 64% of the protected surface belongs to coniferous and deciduous forests, hardwood forests, oak woods, transition scrublands and natural grasslands. These covers reduce the risk of erosion by run-off and contribute to the capture of CO<sub>2</sub>. The maintenance of natural flood areas, the conservation of natural river paths and the conservation of the hydrological functioning also contribute to erosion control and facilitate the sedimentation of materials dragged in the river mouths which form ecosystems of great productivity. Near 70% of the wetlands, 63% of the marshes and 14.3% of the river and creek network have some designation as natural protected space.

Achieving the management objectives of protected areas requires having adequate resources both in terms of personnel and financial and material resources. The costs for managing these areas, as they are of public service, are mostly supported by the competent public administrations. In some cases the contributions with funds from the European Union and the contributions made by private entities are of certain importance. There is still little experience in the use of innovative financial mechanisms, but they are expected to develop to meet the growing management need particularly associated to the development of the Natura 2000 network (EUROPARC-Spain, 2010). It is estimated that at least 4,000 people work directly in the Spanish parks (of which 1,400 work in the 14 National Parks).

As shown in table 3, Teide National Park located in the Canary Islands and more specifically, in the center of the island of Tenerife is the most visited of the network. Followed by the Picos de Europa National Park located in northern Spain, in the Cantabrian Mountains and between Asturias, León and Cantabria. Third in importance is the Timanfaya National Park also located in the Canary Islands, particularly in the central-western part of the island of Lanzarote. The national parks with fewer visitors remain to be the Cabañeros and Cabrera Archipelago. It should be noted that the National Parks of the Canary Islands host on average, more than half of the registered visits.

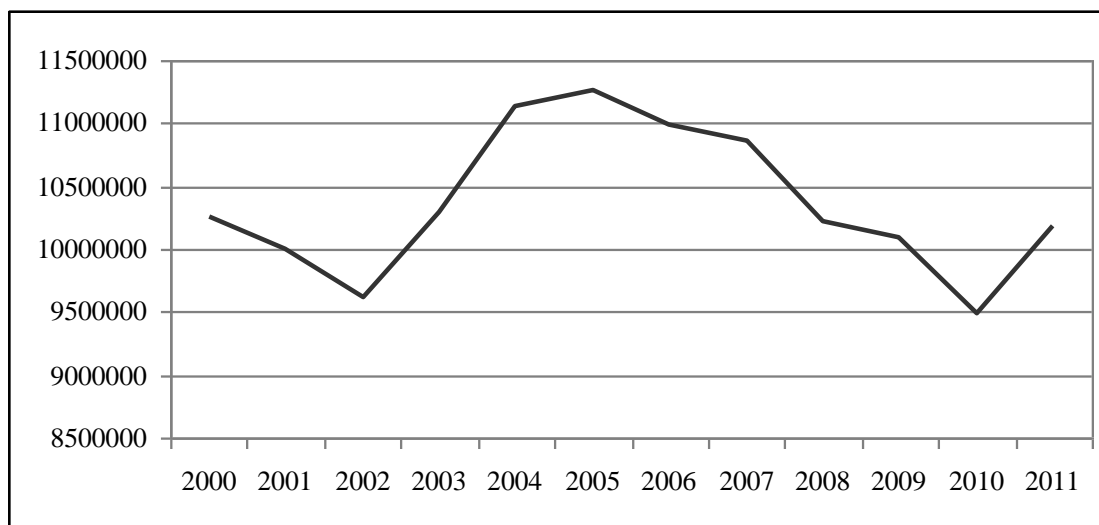
Data on visitor use are essential to the planning and management of National Park units in order to assess visitor impacts to the resource (Pettebone et al, 2010). The inflow to the Spanish National Parks, has been increasing since year 1991, exceeding the number of ten millions of visitors in year 2000 to eleven million in 2004. From 2007 onwards, the number decreases and stays slightly below ten million in 2010, to again overcome this barrier in 2011. While the total number of visitors remains quite stable since 2000, for a sector with so many fluctuations as tourism, since 2000, the total area of National Parks has increased, leading to a decrease in the index of "visitors per hectare", which should not be understood as a decrease in efficiency, but as an investment for the future .

**Table 3. Historical series of visitors to the different Spanish National Parks (2005-2011)**

	2007	2008	2009	2010	2011
Aigüestortes National Park	322,555	304,606	329,227	294,547	322,572
Cabrera Archipelago National Park	76,541	60,804	60,662	64,688	75,544
Cabañeros National Park	72,688	78,767	90,001	92,578	92,038
Caldera de Taburiente National Park	389,024	408,088	377,349	361,343	424,832
Doñana National Park	384,638	350,005	380,155	341,961	326,013
Garajonay National Park	884,858	860,000	625,801	610,254	825,638
Terrestrial and Maritime National Park of the Atlantic Islands of Galicia	238,939	253,967	274,716	292,374	322,396
Monfragüe National Park	351,885	331,788	306,041	297,976	296,219
Ordesa and Monte Perdido National Park	617,950	616,600	617,500	614,059	612,500
Picos de Europa National Park	1,774,955	1,712,669	1,818,671	1,610,341	1,717,728
Sierra Nevada National Park	737,183	684,573	673,302	667,319	680,883
Tablas de Daimiel National Park	122,955	94,687	105,957	398,742	204,314
Teide National Park	3,142,148	2,866,057	3,052,830	2,407,480	2,731,484
Timanfaya National Park	1,748,149	1,600,175	1,371,349	1,434,705	1,549,003

Source: Red de Parques Nacionales (2012).

**Fig. 1. Historical series of total visitors to the Spanish National Parks (2005-2011)**



Source: Red de Parques Nacionales (2012).

#### 4. Conclusion

In many cases, the services generated by natural protected areas in general and National Parks in particular are "invisible" to the market, as they lack an assigned price.

The consolidation of the Spanish National Parks as a reference for tourism activities with over ten million visits on average, is used to put a monetary value which settles the value to a heritage and encourages the public and private sectors for its conservation. This has been reflected in the new national and international regulations, which recognizes tourist use among its main management objectives.

At the same time, from an environmental perspective, the development of tourism gives rise to a series of negative externalities that may affect the conservation of these areas, if the "load capacity" of these is not taken into consideration.

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