



***ENVIRONMENTAL AWARENESS  
MODULE FOR THE TOURISM SECTOR***



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## 1 INTRODUCTION

### 1.1. Background and objectives

The environment is an asset which is common to all society and must be preserved and supported by individuals, as well as by the various administrations through policy action lines to ensure its future enjoyment.

Under the Amsterdam Treaty on European Union (1997), environmental considerations have to be incorporated into all Community activities and policies. The Treaty also includes sustainable development among the list of the objectives of the European Union.

In the Conclusions of the Gothenburg Council in June 2001, the Member States of the European Union underlined the need to integrate the environment and sustainable development in the different Community policies. The European Commission was invited to further examine this aspect and to include in all future proposals for reform a qualitative assessment of the repercussions on the environment and on sustainable development.

Sustainable development is taken to mean a development that “responds to the needs of the present without compromising the capacity of future generations to respond to their own needs”.

An indispensable tool to attain the objective of sustainable development is environmental education, which can contribute to greater environmental awareness on the part of society in general.

In this regard, the Environmental Authorities Network - a cooperation forum linking authorities with powers in the field of the environment and the programming authorities of the Structural and Cohesion Funds - in collaboration with the Spanish Employment Service (INEM) and the European Social Fund has designed an Environmental Awareness Module for use in occupational training courses co-funded by the European Social Fund. This general module marks the first step in the preparation of specific awareness modules for each sector of the economy. One of the priority sectors in this respect is tourism, on which the present module focuses exclusively.

Following the creation of a Working Group on Sustainable Tourism and Structural Funds within the Environmental Authorities Network, a series of commitments have been undertaken, among them the definitive drafting of an Environmental Awareness

Module for the tourism sector as part of the Network's strategy to integrate the environment into all actions co-financed by the European Social Fund.

The Ministry of Tourism, Environment and Regional Planning and the Ministry of the Economy and Finance of the Canary Islands have contributed significantly to the preparation of this Awareness Module.

The Environmental Awareness Module for the tourism sector comprises the following:

- Module handbook
- Teaching video
- CD-Rom

The handbook is a support tool for trainers and students.

The video is a visual aid for the Module and is designed primarily to motivate students.

The CD-Rom contains the handbook in pdf format and a low-resolution version of the video.

The present document seeks to achieve the following objectives:

- Assimilation of environmental concepts by tourism sector employees.
- Awareness of the importance of environment-related aspects in the field of tourism.
- Dissemination of the effects of tourism on the environment.
- Familiarisation with current legislation on sustainable tourism.

## **1.2. Tourism and Environment**

Although travelling is almost certainly as old as humanity itself, *Tourism* as we know it today did not appear until the 19th century, when massive improvements in communications (steam engines, railways ...) propitiated a phenomenon that has grown incessantly ever since. Tourism gradually ceased to be a minority activity, affordable by a select few, to become - spurred on by the advent of cars and, later, aircraft - a truly mass phenomenon. According to the World Travel & Tourism Council, tourism and travel-related activities employ one in every twelve persons worldwide. Tourism arrivals increased from 25 million in 1950 to almost 700 million in 2000 and the World Tourism Organisation estimates that the figure will reach a staggering 1.6 billion in 2020. Of all economic activities, tourism experienced most growth during the 20th century.



In any sector of the economy the temptation exists to procure profits without worrying about the possible deterioration of the environment or of common goods. This may be due to a lack of scruples or to ignorance of environmental issues. In the light of the above statistics, one can readily understand why the vast possibilities for development and economic growth offered by tourism have led many areas to launch themselves headlong into the tourism race, even at the expense of their resources. Environmental degradation would appear to be the price that entire regions have had to pay to develop economically thanks to tourism.

For years the alarm had been sounded by experts and international organisations as to the grave consequences that such unsustainable models of development could have on the future of the planet and on mankind. However, it was not until the first signs of collapse (signs of the disappearance of the ozone layer, global warming and climate change, depletion of fishing stocks, the disappearance of forests, extensive degradation of rivers and coasts, extreme poverty suffered by a large proportion of humanity) that people really came to understand the need for a new development model: Sustainable Development.

For the tourism sector, this new model calls for a change in approach and attitudes, as well as a profound review of tourism's environmental repercussions and implications. Regrettably, the tourism phenomenon encompasses such a vast array of diverse sectors and activities, and is associated with so many economic, social and environmental aspects, that analysis is extremely difficult.

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## **2 TOURISM, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT**

### **2.1. Tourism in Spain**

According to the World Tourism Organisation (WTO), tourism is the biggest-growing industry on Earth and its hegemony appears secure if the current rate of growth is maintained. Revenue in 2000 -excluding air travel- amounted to a massive US\$ 476 billion (approximately 500 billion euros at the 2000 exchange rate).

The European Union earns over half of world tourism revenue. It is the most visited region anywhere in the world and has the widest diversity and greatest density of tourist attractions. The 2 million tourism-related enterprises represent 5% of the EU's Gross Domestic Product and 5% also of the total number of workers (more than eight million jobs). Tourism as a sector has a major influence on the EU economy, due largely to its importance in Mediterranean countries. Suffice it to note that, between them, the five Mediterranean countries of the EU (Portugal, Spain, France, Italy and Greece) account for over half of the Union's entire tourism revenue.

Tourism is set to be one of the major beneficiaries of the changing profile of European society in the coming decades. The ageing population, improvements to health, increased life expectancy and higher income levels among retired people will all result in greater demand for tourism services. Moreover, the introduction of the euro as a common currency, the liberalisation of transport and the development of trans-European transport networks, the more effective operation of the internal market and new technologies will all facilitate mobility and contribute to an increase in intracommunity tourism.

Tourism is of particularly significant importance in Spain, accounting for 10% of GDP. In terms of visitor numbers, we are (behind France) the world's second most important country for tourism. In terms of revenue, our country is also second (to the United States this time), with annual earnings of US\$ 31 billion (approximately 33 billion euros). The figures paint an accurate picture of the importance of Spanish tourism at world level.



| Leading world tourism destinations (2001) |              |                     |                        |                |
|---|--------------|---------------------|------------------------|----------------|
| Rank                                      | Country      | Arrivals (millions) | Difference 2000/99 (%) | Market share % |
| 1   | France       | 75.6                | 1.2                    | 11.1           |
| <b>2</b>                                  | <b>Spain</b> | <b>49.5</b>         | <b>3.4</b>             | <b>7.2</b>     |
| 3   | U.S.         | 44.5                | - 12.6                 | 6.5            |
| 4   | Italy        | 39.1                | - 5.0                  | 5.7            |
| 5   | China        | 33.2                | 6.2                    | 4.8            |
| World Total                               | -            | 688.5               | - 1.3                  | 100            |

*Source: World Tourism Organisation (WTO). Tourism market trends, preliminary results 2002.*

| Leading countries by tourism revenue (2000) |                |                         |                        |                  |
|---|----------------|-------------------------|------------------------|------------------|
| Rank  | Country        | Revenue (millions \$US) | Difference 2000/99 (%) | Market share (%) |
| 1   | U.S.           | 85,153                  | 13.7                   | 17.8             |
| <b>2</b>                                    | <b>Spain</b>   | <b>31,000</b>           | <b>-4.3</b>            | <b>6.5</b>       |
| 3   | France         | 29,900                  | -5.1                   | 6.3              |
| 4   | Italy          | 27,429                  | -3.2                   | 5.7              |
| 5   | United Kingdom | 19,518                  | -3.5                   | 4.1              |
| World Total                                 | -              | 477,900                 | 5.0                    | 100              |

*Source: World Tourism Organisation (WTO). Tourism market trends, provisional edition 2001.*

Tourism in Spain began as a phenomenon in the 1950s, although truly spectacular growth was not seen until 1960s. Spain's tourism success has traditionally been based on the sun-and-sand recipe, which is very popular with many European and American holidaymakers. Millions of tourists travel to Spain every year to enjoy the sunshine, heat and other attractions that make our country a favourite destination.

Spain is a largely family holiday destination, with a high proportion of repeat customers (around 60% of visitors return another year). Hospitality, the warm welcome and fun tend to be the most highly-appreciated aspects. In contrast, environmental aspects (noise, dirty towns and cities, among others) tend to be rated poorly among visitors. Europeans are increasingly concerned with environmental issues, particularly in Germany, Denmark, the Netherlands and Luxembourg. Specifically, the most critical aspect for Europeans is the degradation of beaches and of sea animals and plants.

Recent years have seen the emergence of two vital factors in relation to the tourism sector and the environment. Firstly, the diversification of the tourism offer worldwide. *Sun and Sand* is no longer the only option available. Tourism has evolved of late and now encompasses a range of possibilities, from rural tourism to adventure holidays and





including ecotourism, agrotourism, etc, all of which are related in some way to the environment. As a result, the environment itself has become a key tourism resource.

Secondly, and equally important, new destinations have emerged to compete with Spain, offering similar products. Our *Sun and Sand* now has to contend with competition in other countries, not just in the Mediterranean but worldwide. Many of these emerging destinations are in a position to plan their urban and social development appropriately, avoiding the physical and urban planning mistakes made by many coastal towns in Spain in recent decades. By way of example, while it would prove hard to sell the idea of pristine beaches in Benidorm to the holiday market, these can still be readily imagined in Cancun or Belize.

By the same token, however, one of the dangers facing many emerging holiday destinations is that they may well sacrifice their environment for the sake of the economic needs that lie behind their quest for custom. Still, these new destinations have an advantage in that they can offer tourist services in surroundings that are less exploited and less degraded than our coasts (in the case of *Sun and Sand*) or less well-known.

Both factors - the diversification which has resulted in the environment becoming a resource and the competition posed by rival destinations with better-preserved environments - represent a threat Spain's continued success in the tourism sector.

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## **2.2. Interactions between Tourism and Environment. The need to work towards Sustainable Tourism**

Tourist activity has traditionally been synonymous with degradation of the environment. Deterioration of environmental resources appears to have been the price paid by entire regions to secure their development through tourism.

We now know that economic development does not always guarantee quality of life for individuals and populations. If such quality is to be achieved, economic growth must respect certain limits, namely, those set by the needs of future generations; the limits that ensure that nature will not be destroyed; the limits guaranteeing equitable distribution of wealth in order that all human beings can live in dignity.

For this reason, various international institutions, both public and private, -UN, UNESCO, FAO, IUCN, WWF, World Bank, etc.... - established several decades ago the new concept of Sustainable Development. "*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*"<sup>1</sup>.

This concept is not defined in absolute terms. Rather, it is an aspiration, a process. In reality, sustainable development is the path humanity has to take to ensure the viability of future life on the planet. It therefore involves us all; the attainment of a worldwide system of sustainable development is a goal shared by all humanity.

Under the new concept, societies must not breach the limits of nature in striving to satisfy the economic needs of individuals or of populations.

Within this framework Sustainable Tourism endeavours to meet the current needs of the local population and of all tourism stakeholders, without endangering the capacity to satisfy future needs. It acknowledges the contribution made by people and communities, by customs and life styles, to the tourist experience. It accepts that the population should participate equitably in the economic benefits of tourism and it is guided by the wishes of the local population and communities in tourism destination areas. At this point, it is important that we do not forget that sustainable tourism is not

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<sup>1</sup> The most frequently-quoted definition is from the report entitled 'Our Common Future' (also known as the Brundtland Report). World Commission on Environment and Development (WCED). Our common future. Oxford: Oxford University Press, 1987 p.43.

an isolated concept but rather is part of a global sustainable development strategy and is based on the notion that economic growth can and should contribute to enhancing protection of the environment.

In recent decades the complex nature of tourism has resulted in a series of initiatives designed to promote sustainability. These initiatives have emerged in various sectors, from governments to consumer bodies (i.e. tourists themselves). This is a new situation in which all stakeholders are now beginning to demonstrate an awareness of their role in the common task of shouldering responsibility for the protection of humanity's natural and cultural heritage.

Moreover, from the economic standpoint the environment has become an extremely valuable resource for attracting tourism. It is among the factors rated most highly by visitors and one of our country's most sensitive aspects compared to destinations that are beginning to compete successfully with Spain.

#### **The resurgence of Calviá**

*During the mid-1980s Calviá was a prime example of what tourism activity and permissiveness by the authorities can lead to when intent upon unrestrained development that disregards the environment. Calviá's prospects and prestige as a resort were in decline and it had been blacklisted by tour operators, who were beginning to express misgivings about certain coastal destinations in Spain on account of their lack of respect for the environment.*

*The change undergone by Calviá, which merited the European Sustainable City Award in 1997, was based on the application of Local Agenda 21, launched at the Rio de Janeiro Conference. Businesses, the local council, trade unions and other social entities agreed on a management model, which has since attracted considerable interest. Permitted building was cut to one third, as a result of which 14 hotels were demolished and almost 1,500 hectares of approved building land were reclassified to make way for vast greenbelt areas. Several urban areas were pedestrianised and a system for selective waste collection introduced ....*

*Source: Sustainable Tourism Ideas and Programmes, SADAVE 2000 (Association of Spanish Travel Agents).*

The survival of tourism businesses hinges on the quality of the offer, which in turn requires a continuous programme for improved management, ongoing training for managers and employees and permanent adaptation to technological innovations to allow better use to be made of all kinds of resources and to ensure the polluting or aggressive effects on the environment are reduced. Although there is no immediate political return or creation of wealth, this is the only viable option for the future.

### 3 TYPES OF TOURISM AND THEIR IMPACTS ON THE ENVIRONMENT

#### 3.1. Sun and Sand Tourism

Most holidaymakers travel in search of sun and sand. The Mediterranean Basin is the world's leading holiday region. In the case of Spain, it is important to bear in mind the high geographical concentration of the most popular destinations. In 2002, 92% of foreign visitors holidayed in just 6 regions (in order of importance): Catalonia (11.6 million), Canary Islands (10.6 million), Balearic Islands (9.6 million), Andalusia (7.4 million), Valencia (5 million), and Madrid (3 million).

For their part, Spaniards tend not to choose the Islands for holidays as much as foreign visitors. Half of all holidays are taken in destinations in the Mediterranean regions. By contrast, the Cantabrian coast has seen much more moderate tourism development (currently receiving only 4% of foreign and 14% of domestic tourism) and the contribution of tourism activities to environmental problems is therefore considerably lower.

| Number of Tourists by destination regions 2002                      |                                     |                              |
|---|-------------------------------------|------------------------------|
| Sources: Inbound Tourism Survey (Frontur). IET.                     |                                     |                              |
| Domestic tourism survey (Familitur). IET, provisional figures, 2002 |                                     |                              |
| Region  | Year 2002. Inbound visitor entries. | Year 2002. Domestic tourists |
| Catalonia   | 11,572,650                          | 4,897,889                    |
| Canaries  | 10,648,142                          | 1,626,025                    |
| Balearics   | 9,581,286                           | 1,048,497                    |
| Andalusia   | 7,422,339                           | 8,138,293                    |
| Valencia/Murcia   | 5,369,679                           | 6,400,759                    |
| Madrid  | 3,011,481                           | 2,747,184                    |
| Cantabrian coast  | 2,114,425                           | 5,427,914                    |
| Interior regions  | 2,027,713                           | 9,786,964                    |

The regions on the Mediterranean coast (Catalonia, Valencia, Murcia and Andalusia) and the Islands are the mainstays of Spain's sun and sand tourism.

Throughout history, coastal areas have been crucial to the development of society. These areas continue to have great potential today. Coastal lagoons, inlets, mud flats, and estuaries are vital for food production and for the protection of nature and biodiversity. However, Europe's coastal areas face serious problems such as habitat destruction, water pollution, coastal erosion and resource depletion.

Tourism in Spain grew spectacularly from the 1960s onwards, although the phenomenon was confined almost entirely to the Mediterranean. The number of tourists rose from just over 1 million in 1950 to almost 15 million in 1965 and over 30 million in 1975. At the time, the demand led to such pressure that the authorities were often so overwhelmed they were unable to control the boom in tourism.

Admittedly, the advent of tourism brought improvements in infrastructures and also in the lifestyles of many rural areas, hitherto largely ignored. The fact remains, however, that the sector's explosive development lacked proper planning, leading to disorderly and intensive use of natural resources and triggering profound alterations to the environment and even the disappearance of many ecosystems.

### **Negative impacts**

The habitual negative impacts suffered by these areas, particularly the Mediterranean coast, include the following:

- Land speculation and mass urban development in rural areas, with no planning and insufficient health and sanitary infrastructures.
- Mass invasion of natural zones, leading to destruction of habitats and loss of biodiversity. By way of example, three quarters of the sand dunes on the Mediterranean coastline from Spain to Sicily have disappeared, chiefly as a result of tourism-gearred urban development.
- Unsustainable exploitation of resources such as water, leading to ecological and economic damage as well as social conflict.
- Serious deterioration of the landscape due to the proliferation of infrastructure and constructions of all kinds and also to the accumulation of waste.
- Increased dumping and waste, without the necessary infrastructure for treatment; deficiencies in wastewater treatment in coastal towns.
- Alterations to traditional lifestyles.
- Traffic congestion, noise and other nuisances.

- Atmospheric pollution caused by the concentration of vehicles in traditional tourist destinations.
- Impact of unsustainable energy use on natural resources.

These problems are compounded by the concentration of tourism in relatively short holiday periods (seasonality) and certain (often very small) areas, which are exposed also to environmental pressure from other activities such as farming, fisheries, industrial development or the growing resident population.

In sun and sand zones, seasonality problems can often be partly mitigated by '**senior citizens' tourism**', i.e. subsidised travel by large groups of elderly people to coastal resorts, usually in low season. This kind of tourism is likely to grow in years to come due to the ageing of Spain's population and increased life expectancy. It will feature prominently in future and tourist services will need to adapt to the needs of this sector of the public.

Without doubt the most important adverse impact, one with a knock-on effect on all the others, is uncontrolled urban development, a consequence of the high tourism demand on the coast (the United Nations predicts that in 2025 the area of the Mediterranean coastline occupied will reach 8,000 km<sup>2</sup>).

Other impacts mostly result directly or indirectly from urban development. In the case of Spain, the specific problem of water merits special mention.

The Mediterranean coast and most parts of inland Spain suffer from a scarcity of water, which is the most crucial factor in the continued survival of many ecosystems and of natural and agricultural processes. Mass development of urban zones and tourism amenities, together with irrigation farming, have led the demand for freshwater to increase far beyond the true possibilities of the areas in question. This leads to overexploitation of water resources, particularly groundwater, and in many cases the intrusion of seawater salt as the water table lowers. As a result, the quality of drinking water has deteriorated in many parts, which are forced to build costly infrastructure, such as systems to redistribute/transfer water or sea water desalination plants, to guarantee availability of water for agriculture and for human consumption, with the significant environmental impact and economic repercussions this entails.

The shortage of water is at variance with the growth expectations in sectors such as tourism and agriculture and can often be the cause of strained relations between some regions and others, as well as between different sectors of the economy, which blame water for curbing their development possibilities.

Each person needs to drink 2 litres of water every day, Statistics show that total daily consumption for other activities (personal hygiene, showers, washing, cooking, etc) is 165 litres, even higher in the case of tourists. If we add the enormous amounts used by swimming pools and other aquatic leisure installations, we can imagine the potential consumption of water in a highly-developed tourism area such as the Mediterranean coast.

At the World Ecotourism Conference (Quebec, May 2002),<sup>2</sup> the reports from the European preparatory conferences highlighted the major contrasts that exist in terms of landscape, climate, culture and management priorities, with specific mention of the problems of Mediterranean tourism: *The tourism in this area is concentrated on coastal parts and is one of the most important anywhere in the world. However, this area is rich in biodiversity and has equally rich natural resources. The report from the Greece conference identified the ecotourism potential of inland zones both near the coast and further away as a means of enhancing the image of Mediterranean destinations by diversifying the offer, reducing seasonality and ensuring economic benefits for parts affected by depopulation. Careful planning is essential.*

### 3.2. Rural Tourism

The Office of the Secretary General for Tourism has adopted the following definition of rural tourism: “*tourist use of all kinds in rural areas, that respects a series of limitations, namely:*

- The tourism must be diffuse, i.e. a dispersed as opposed to concentrated tourism offer.
- It must respect the natural and cultural heritage.
- It must actively involve the local population.
- It must include local traditional activities and avoid mass-scale and monoculture tourism.”<sup>3</sup>

Rural tourism, traditionally popular throughout Europe, is currently experiencing a period of rapid expansion as part of an overall drive to diversify the rural economy,

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<sup>2</sup> [http://www.ecotourism2002.org/espagnol/conferences\\_e.html](http://www.ecotourism2002.org/espagnol/conferences_e.html).

<sup>3</sup> Turismo Rural y Turismo Activo. Francisco J. Melgosa Arcos. Universidad de Salamanca. Published in the collection by MELGOSA ARCOS, F.J. “*Estudios de Derecho y Gestión Ambiental*” (2 Vol.). Ed. Consejería de Medio Ambiente y Ordenación del Territorio y Fundación Cultural Santa Teresa. Ávila, 1999.

given the diminishing importance of farming. Some modes of rural tourism may have a lower environmental impact and are thus becoming increasingly popular also.

Although not a massive profit-earner, rural tourism has grown progressively in Europe in recent years as a result of changing demands among tourists, who are increasingly looking to environmental, sociocultural and traditional aspects. Here too, however, some element of deceit exists, due partly to the confusion inherent in the very term rural tourism. In many cases, what is billed as rural tourism is not. Hence the need for strict regulation, as is occurring in Spain, where most regions have already put in place Decrees regulating rural tourism establishments.

The legislation adopted by the different regions varies greatly, both in terms of the delimitation of territories and also the type of accommodation. Each region has its own typologies, adapted to its rural architecture (hamlet houses, farm-labourer's cottages, farmhouses, rural hotels, boarding houses, rural apartments, campsites, rural tourism centres, etc). Similarly, depending on the region, the minimum requirements for these amenities vary, as does the maximum capacity of rooms or beds per accommodation in rural areas.

In 1989 there were 250 such establishments in the whole of Spain, compared to the approximately 6,000 officially-registered rural accommodation units in 2001. Without doubt this spectacular rise is due in part to the LEADER Community initiatives and PRODER programmes, through the funding provided for new rural hotels and restaurants as well as for the rehabilitation and improvement of buildings to encourage this type of tourism nationwide.

Other actions under these European initiatives include improvements to the appearance of towns, conservation and enhancement of historic and environmental heritage, route design and signposting, recuperation of traditional gastronomy, recuperation of festivities and events, and programmes to improve the quality of accommodation<sup>4</sup>.

### **Rural Development Promotion Unit**

The Ministry of Agriculture, Fisheries and Food has created the Rural Development Promotion Unit, in accordance with the Communication by the Commission to Member States of 14 April 2000, which lays down guidelines for the Community initiative for

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<sup>4</sup> Revista de Desarrollo Rural nº 18. Monographic edition: "El turismo rural abre nuevos caminos" (New openings for rural tourism). December 2002



rural development (LEADER +) (OJEC C 139). The Unit is a structure designed to promote the exchange of achievements, experiences and technical knowledge among all those interested in rural development, in fostering cooperation among territories, and in obtaining and disseminating information on rural development.

The Communication stipulates that each Member State must set up a national organisation unit and also provides for the creation of an 'Observatory' of rural territories to be led by the Commission. In the case of Spain, the national structure will be headed by the Directorate General for Rural Development of the Ministry of Agriculture, Fisheries and Food.

(<http://redrural.mapya.es/web/default.asp>)

### **3.2.1. Agrotourism**

Closely related to rural tourism is agrotourism, a form which might be defined as the activities organised by farmers to complement their main business and in which tourists are invited to participate. These activities take the form of services for which a fee is charged.

This tourism mode can be considered an alternative and a strategy to generate supplementary income in the farming sector. It has come about in response to a specific problem: the crisis suffered by farming in rural areas, particularly the most marginalised ones.

Agrotourism helps increase social contact, fulfil personal goals and avoids family members having to seek work outside the farm.

In order to avoid confusion from the classification standpoint, the Ministry of Agriculture – in the Environmental Authorities Network working group on “Sustainable Tourism and Structural Funds” – draws a distinction between “agrotourism” and “ecotourism”. The difference lies in the ownership of the tourism enterprise: in agrotourism the activity is directly linked to the main farming activity and is organised directly by the farmer, whereas in ecotourism, although it is linked to the rural environment, the owner of the business is not a farmer.

The impacts of this form of tourism seem less serious than those caused by other types of mass tourism. However, since it also involves an activity in the rural environment it will always lead to some form of impact on the ecological systems in which it is organised.

Unlike ecotourism - and given the very definition of agrotourism, i.e. a form in which farmers themselves participate -, the potential impacts are related to a loss of identity on the part of the farming community and modifications to its traditional lifestyle.

Like other forms of tourism, albeit to a lesser extent, agrotourism also poses problems such as waste management, increase in noise, vehicles, etc.

### **3.3. Nature Tourism**

#### **3.3.1. Tourism in Protected Natural Areas**

As a result of the resurgence of interest in nature throughout Europe, more and more people are visiting protected areas such as World Heritage Sites, Biosphere Reserves, National Parks, Natural Parks, etc.

The increased revenue obtained from the growth in tourism in these areas can contribute to resource management and benefit both the natural areas themselves and the local populations. Moreover, visitor interest in animal and plant life can contribute to biodiversity conservation.

In order to guarantee the protection of natural zones and to ensure compatibility with use by the general public and tourists, most protected natural areas have planning mechanisms, the most common being Natural Resource Management Plans (Spanish acronym, PORN), which are often supported, where appropriate, by General Use and Management Plans (PRUG) or even Public Use Plans.

Levels of protection need to be adequate to ensure that the visitor impacts that tend to occur in such areas do not exceed the level of the conservation effort itself.

#### **Negative Impacts**

Among the most negative impacts of tourism in protected areas the following deserve mention:

- Construction of tourism or communications infrastructure in protected areas, leading to direct or indirect negative impacts.
- Human presence causes environmental stress and changes in animal behaviour. If not managed adequately, the concentration of large numbers of visitors at specific times of the year can endanger the conservation role of the areas in

question. According to statistics from the Ministry of the Environment, Spain's National Parks received almost 10 million visitors (9,627,359) in 2001<sup>5</sup>.

- The introduction of foreign species endangers the delicate equilibrium of existing populations in the zone.
- Poaching has resulted in the extinction of many species of animal and fish, causing irreparable harm to endangered populations.
- Waste and litter left behind deteriorate conditions locally and are a health hazard for protected species.
- Animals are often hit by cars driving through these areas at speed.
- Certain activities, such as climbing, diving etc. can harm plant and animal life, and hence tend to be restricted in certain parts of protected areas.

At the end of 2000, EUROPARC – Spain presented a study entitled “Protected Natural Areas in Spain on the eve of the 21st century: from declarations to active management”, which provides information on a range of aspects concerning these areas. The study notes that Spain's parks receive 30 million visits every year and predicts an annual growth rate of 4.5%. It states further that “control and monitoring of these visits is fundamental to avoid massification, which will impact negatively on the recreational experience of the visitor and also on the natural values of the areas”.

Spain later published its “Action plan for protected natural areas in Spain” (2002)<sup>6</sup>, which describes the rise in visits to natural areas and the reasons for the increase:

*“In 1984 just over 2,400,000 people visited Spain's National Parks. The figure has quadrupled in 15 years. At present, Spain's protected areas receive over 30 million visitors annually. Among the different reasons for this growth are increased purchasing power and mobility, greater environmental awareness and information, more leisure time and the need for green areas”.*

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<sup>5</sup> 2001 Annual Report on the Environment. Ministry of the Environment, 2002.

<sup>6</sup> EUROPARC-Spain. 2002. Action Plan for protected natural areas of the Spanish State. Fundación Fernando González Bernáldez. Madrid.

| Visitors to National Parks 1996-2001  |                  |                  |                  |                  |                   |                  |
|---------------------------------------|------------------|------------------|------------------|------------------|-------------------|------------------|
| National Park                         | 1996             | 1997             | 1998             | 1999             | 2000              | 2001             |
| Aigüestortes i Estany de Sant Maurici | 333,734          | 345,545          | 349,021          | 396,223          | 382,624           | 410,427          |
| Archipiélago de Cabrera               | 39,265           | 43,215           | 52,796           | 47,302           | 44,983            | 64,078           |
| Cabañeros                             | 22,984           | 30,145           | 51,000           | 52,921           | 59,015            | 51,822           |
| Caldera de Taburiente                 | 250,000          | 210,141          | 265,961          | 288,032          | 347,619           | 377,726          |
| Doñana                                | 366,287          | 417,287          | 385,393          | 384,276          | 385,563           | 394,401          |
| Garajonay                             | 450,000          | 550,000          | 525,000          | 550,000          | 615,000           | 149,737          |
| Picos de Europa                       | 1,676,392        | 1,535,376        | 1,451,697        | 1,619,588        | 1,869,063         | 1,665,078        |
| Ordesa y Monte Perdido                | 624,503          | 601,500          | 603,004          | 624,263          | 635,876           | 657,045          |
| Sierra Nevada                         |                  |                  |                  | 250,000          | 275,000           | 292,128          |
| Tablas de Daimiel                     | 130,774          | 285,371          | 146,652          | 112,195          | 115,503           | 109,753          |
| Teide                                 | 3,000,000        | 3,237,000        | 3,520,000        | 3,800,000        | 3,722,913         | 3,589,164        |
| Timanfaya                             | 1,575,135        | 1,606,638        | 1,691,347        | 1,742,087        | 1,800,000         | 1,866,000        |
| <b>TOTAL</b>                          | <b>8,469,074</b> | <b>8,862,218</b> | <b>9,041,871</b> | <b>9,868,886</b> | <b>10,255,159</b> | <b>9,627,359</b> |

Source: 2001 Annual Report on the Environment. (Ministry of the Environment, 2002)

The European Charter for Sustainable Tourism in Protected Areas was adopted as part of the priorities at world and European level set out in Agenda 21. It is also one of the objectives of the “Parks for Life” action plan established by the World Conservation Union (IUCN). The Charter aims to serve as a working method based on the principle of collaboration between protected area management authorities, tourism businesses, tour operators and other local actors.

Membership of the European Charter for Sustainable Tourism brings several advantages for the protected area. To begin with, in Europe it distinguishes the area as a territory of sustainable tourism excellence and means that more sustainable tourism professionals participate in policy matters. It also propitiates a form of socioeconomic development that respects the environment and helps develop quality and environmentally-compatible tourist products<sup>7</sup>.

### 3.3.1.1. Biosphere Reserves

The concept of “Biosphere Reserve” is increasingly associated today with the promotion of sustainable tourism. The concept originated in UNESCO's MAB (Man and Biosphere) Programme. “*Biosphere reserves are areas of terrestrial and coastal/marine ecosystems or a combination thereof, which are internationally recognized within the framework of UNESCO's programme on Man and the Biosphere*<sup>8</sup>”.

Biosphere Reserve Network:

(<http://www.gobcan.es/medioambiente/biodiversidad/ceplam/areasprotegidas/reservas.html>)

<sup>7</sup> La Integración del Medio Ambiente en el sector turístico. Francisco J. Melgosa Arcos. Published in the collection edited by Francisco Javier Melgosa and Enrique Sánchez Goyanes “Medio ambiente y desarrollo sostenible”, Revista de Estudios Locales y la Junta de Castilla y León (July, 2001).



The World Network of Biosphere Reserves, created within the framework of the UNESCO "Man and Biosphere" (MAB) Programme, is currently one of the most important instruments for nature conservation and local development.

The network encompasses a wide selection of areas with terrestrial and marine ecosystems of great ecological and landscape value, and representative of specific cultural and bio-geographical areas. It seeks to combine nature conservation with investigation, international monitoring of the environment and regional sustainable development. It also enables environmental conservation to be reconciled with sustainable activities, including tourism.

The Spanish Network of Biosphere Reserves comprises areas of significant environmental value, in which the management priorities are biodiversity conservation, in the wide sense of the term, and policies aimed at sustainability and social participation. Spain currently has 22 Biosphere Reserves<sup>9</sup>.

There are various types of Biosphere Reserve. Some coincide almost exactly with National or Natural Parks, while others embrace a complex territory that includes protected areas, together with urban, industrial and tourist areas. Lastly, some Reserves consist of entire islands (La Palma, Lanzarote, El Hierro, Minorca).

In order to render compatible the conservation of natural values and the use of natural resources, Reserves are divided into three inter-related zones:

- Core Zone: this includes the best-conserved ecosystems, which are characteristic of one of the world's terrestrial, coastal or marine regions.
- Buffer Zone: this zone surrounds the core and is part of its area of influence. Activities carried out here must not be an obstacle to the core's conservation objectives.
- Transition Zone: these tend to be the areas where human intervention is greatest but where management and exploitation criteria guarantee the sustainability of the Reserve's heritage and natural resources. The main sustainable development pilot projects are carried out here.

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<sup>8</sup> Statutory Framework of the World Network of Biosphere Reserves

## Evolution of Biosphere Reserves

The International Conference on Biosphere Reserves, held in Seville in 1995, concluded that Biosphere Reserves are necessary to preserve biological diversity, maintain healthy ecosystems, learn about natural systems and how they are changing, learn about traditional forms of land use and also to further knowledge of the sustainable management of natural resources and to cooperate in resolving the problems of natural resource management.

Coinciding with the celebration of the International Conference on “Sustainable Tourism Destinations: common problems, shared solutions”, organised in La Palma on 25-26 April 2003, the La Palma Biosphere Reserve joined the European Sustainable Destinations Network, which cooperates with the Latin American Confederation of Tourist Organisations in exchanging information and experiences for the development of sustainable tourism destinations and products. The La Palma Biosphere Reserve also joined the European Programme “A New Sun for Islands” for the application of innovative renewable energy technologies.

Representatives of the Ministry of Science and Technology helped the meeting identify development and technological innovation programmes, particularly the ‘Artepyme’ programme for the implementation of pilot experiences in alternative transport in the La Palma Biosphere Reserve. The meeting also endorsed the Startic Declaration on the planning and management of tourist landscapes as one of the most recent challenges in sustainable tourism.

The importance of ecolabels as tools for sustainability was also acknowledged, with particular mention of the work of ECOTRANS (a body created in 1988 to study the impacts of conventional tourism, <http://www.ecotrans.org>) in raising the visibility of ecotourism quality.

Lastly, the meeting underlined the importance of European programmes for alternative forms of transport, sustainable buildings and habitats, and recommended that these guidelines be implemented in new tourism projects. Emphasis was also placed on the implementation of sustainable tourism indicators to monitor development<sup>10</sup>.

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<sup>9</sup> For a list of UNESCO Biosphere Reserves (February 2003), see <http://www.unesco.org/mab/brlist.htm>

### 3.3.2. Ecotourism

Ecotourism has been defined as nature-based tourism but also as a tool for sustainable development, a subject which has been the focus of attention by NGOs, development experts and universities since 1990. The term ecotourism refers to a concept based on a set of principles and, at the same time, to a specific market segment.

The International Ecotourism Society<sup>11</sup> put forward one of the first definitions back in 1991: *ecotourism is responsible travel to natural areas that conserves the environment and improves the well-being of local people* “.

For its part, the IUCN<sup>12</sup> (World Conservation Union) defined ecotourism in 1996 as *“Environmentally responsible travel to natural areas, in order to enjoy and appreciate nature (and accompanying cultural features, both past and present) that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local peoples”*.

The above definitions led to a general consensus on the basic elements of ecotourism, as defined by the UNEP (United Nations Environment Programme):

- It contributes to biodiversity conservation.
- It helps maintain the quality of life of local populations.
- It includes a nature interpretation and learning experience.
- It entails responsible action by tourists and by the tourist industry.
- It is aimed mainly at small groups through the promotion of small businesses.
- It requires the lowest possible consumption of non-renewable energies.
- It emphasises local participation and business opportunities, particularly for the rural population.

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<sup>10</sup> Agreements reached at the International Conference on “Sustainable Tourism Destinations: common problems, shared solutions”, organised by the La Palma Biosphere Reserve, April 2003

<sup>11</sup> <http://www.ecotourism.org>

<sup>12</sup> <http://www.iucn.org/>



One of the main events related to ecotourism at world level was the designation of 2002 as *International Year of Ecotourism*.

The most important activity commemorating the International Year of Ecotourism was the World Ecotourism Summit, held under the aegis of the World Tourism Organisation (WTO) and the United Nations Environment Programme (UNEP). The Summit took place in Quebec City (Canada) from 19-22 May 2002.

The Summit's most important outcome was the Quebec Declaration on Ecotourism<sup>13</sup>.

### **Negative Impacts**

The adverse impacts related to this form of tourism are similar to those noted above for nature and rural tourism, although they are to some extent mitigated by the element of responsibility for responsible action inherent in ecotourism, which naturally focuses on the behaviour of visitors and the tourism businesses promoting and selling ecotourism.

However, there are some additional threats posed by this form of tourism, such as the proliferation of businesses that use ecotourism as a slogan but fail to meet the minimum requirements applicable thereto.

### **3.4. Urban Tourism**

Almost 80% of Europe's population live in towns and cities. As a result, Europe is the most built-up continent in the world and the urban question one of the major challenges of the coming years.

Urban tourism may be considered the product of increased mobility among Europeans, for whom towns and cities are unavoidable transit points. It is also the result of changing behaviour, which has seen towns and cities become cultural centres and places for relaxation, shopping, eating or simply for passing the time in squares, streets or in public areas.

In many cases, the towns and cities are not only the main purpose of the visit but also obligatory stopovers for those travelling to a specific region or country. Many businessmen and businesswomen have become accidental tourists during their short city stays.

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<sup>13</sup> Quebec Declaration on Ecotourism, 22 May 2002, Quebec (Canada): <http://www.world-tourism.org/sustainable/IYE/quebec/anglais/declaration.html>



Urban tourism includes activities such as

- Leisure tourism, related to the characteristics of urban areas.
- Business tourism, related to the economic, social and cultural vitality of towns and cities.
- Conference tourism, related to the facilities available in towns and cities for conferences and to the image of such facilities.

Most of Spain's leading visitor attractions are of historic, cultural or religious interest. The large numbers of tourists who visit the most important cultural heritage sites and cities in Spain and in Europe cause environmental problems such as traffic congestion and deterioration to buildings. As urban tourism becomes more popular, the number of visitors to cities and historic and cultural sites will increase in the future.

The lack of cohesion between urban development, land use management and urban management policy is often the cause of a gradual deterioration of the environment in urban tourism destinations. An awareness of this deterioration and of the future impact on tourism development and on the quality of life of city residents can produce positive results. In many cases, attempts are made to resolve the problem by combining environment and tourism within the framework of a Local Agenda 21 process or an URBAN Community initiative to improve the quality of infrastructures and environmental conditions.

Integrated quality management of urban tourism destinations is examined by the European Commission in its document "Towards quality urban tourism"<sup>14</sup>, a case study of 15 destinations in Europe reflecting the diversity of European urban tourist destinations. The aim was to reflect real and illustrative experiences and to establish a series of recommendations aimed at public and private tourism stakeholders wishing to contribute to the sustainable development of the tourism industry in their town/city and the surrounding area.

Tourism may thus act as an incentive for a renewal of urban development. The existence of a sufficiently large local population and adequate infrastructures in large cities means that sizeable numbers of visitors can be absorbed without difficulty. Smaller, confined areas, such as walled towns and cities or historic sites, require a greater effort to cope with the concentration of tourists, traffic congestion and

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<sup>14</sup> Towards quality tourism. Integrated quality management of urban tourist destinations. Enterprise Directorate-General, Tourism Unit. European Commission. Brussels, 2000.

emissions or deterioration to buildings, in addition to the more general environmental problems mentioned above.

### **Cultural Tourism**

In Spain, **cultural tourism**, which is closely bound up with urban tourism, has taken on significant importance in recent years. Spain is home to over 30 UNESCO cultural interest sites, many of them associated with historic parts of cities. Examples include the Historic Centre of Cordoba and the Old Towns of Segovia, Caceres, Avila, Toledo and Santiago de Compostela. These cities have formed a network in recent years to act together to defend their historic and cultural heritage, exchange experiences and, above all, to plan tourism policy and project a common image. Sustainability in these cities is associated with the success of tourism models that are integrated in the local community and economy.

Tourism is a crucial part of the local life and the economy in Spain's historic cities. Sustainable development is the strategy required to ensure tourism can operate in a manner which is compatible with the environment, society and the economy.

In July 2002, the Spanish Government approved a Cultural and Language Tourism Promotion Plan covering the period 2002-2004. The Plan contains promotion measures, which are set out in respective Marketing Plans for cultural tourism and for the teaching of Spanish, as well as measures to create and improve the cultural tourism offer, with particular emphasis on resource accessibility, information systematisation and dissemination and the creation of marketing conditions for tourism of this type.

According to the Plan the list of cultural tourism routes comprising the Route of Santiago de Compostela, the Silver Route and Spain's World Heritage Cities will be supplemented by the Route of the Spanish Language, which will include regions such as La Rioja, Castillo-León and Madrid.

The most habitual negative impacts include:

- Degradation of urban environments or cultural interest sites due to pollution, waste or wear-and-tear produced by traffic and large numbers of visitors. Many buildings and monuments require extensive periodic cleaning and restoration.
- In some parts, tourists may become a major source of waste and litter (plastic bags, bottles...)

- Inconvenience and nuisance of various types are caused to residents and non-residents (traffic congestion, saturation of amenities and services, noise...).

### 3.5. Active Tourism

Sport is a vital social phenomenon, both in terms of promoting mental and physical health and also as a factor to address social imbalances, by creating habits that foster social integration.

According to the European Sports Charter (May 1992) sport means *all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels.*

Spain's Tourism Institute (TURESPAÑA) classifies the various activities included under active tourism as follows:

- a) Land-based activities: bicycles, cycling, horses, ravines, gorges, culture, climbing, pot-holing, caving, skiing, mountaineering, multi-adventure, bird-watching, orienteering, bungee-jumping, trekking, archery, clay-pigeon shooting, sleighing, theme parks.
- b) Aquatic activities: boating, water-skiing, pedal-boats, white water sledging, canoeing, catch and release fishing, rafting, diving, surfing, yachting, windsurf.
- c) Air activities: hang-gliding, ballooning, parachute-jumping, paragliding, microlight, gliding.

Two projects in particular reflect the interest these activities generate in Europe:

1. The *Euro Velo* cycling tourism project, which is promoted by the European Cyclists Federation with support from the European Commission, aims to develop a network of twelve international cycling tourism routes throughout Europe. The Spanish section comprises three Routes - Atlantic Coast, Pilgrims and the Mediterranean - combining old railway lines, livestock trails, cultural routes (the Route of Santiago and the Silver Route), country paths and roads with little traffic. The creation of these routes will benefit tourism businesses situated along the

- way. By way of example, tourists following the Danube Cycle Route in Austria account for up to 90% of overnight stays.<sup>15</sup>
- The 'Euro Rando' European walking project aims to maintain a network of paths throughout the continent, enhance knowledge of European culture and contribute to the protection of the environment.<sup>16</sup>

According to article 10 of the European Sports Charter, *ensuring and improving people's physical, social and mental well-being from one generation to the next requires that sporting activities, including those in urban, open country and water areas, be adjusted to the planet's limited resources and be carried out in accordance with the principles of sustainable development and balanced management of the environment.*

## Negative impacts

**TABLE 1**  
**Classification of outdoor recreational and sporting pursuits according to their potential environmental impact**

|                           | LOW  | MEDIUM   | HIGH   |
|---------------------------|--|--|--|
| <b>Snow activities</b>    | Cross-country skiing<br>Rackets<br>Dog sleds   | Backcountry skiing   | Alpine skiing<br>Heliskiing<br>Snowbikes   |
| <b>Land activities</b>    | Cycle tourism<br>Nature contemplation<br>Bungee-jumping<br>Spa<br>Cultural tourism<br>Educational tourism<br>Rural tourism | Mountaineering<br>Bathing<br>Mountainbiking<br>Camping<br>Eating in the countryside<br>Rock-climbing<br>Outdoor events/shows<br>Pot-holing<br>Excursions<br>Climbing<br>Fishing<br>Walking<br>Equestrian tourism | Non-regulated camping<br>Hunting<br>Photo-hunting<br>Golf<br>Safari<br>4x4 driving<br>Motocross<br>Cave visits |
| <b>Air activities</b>     | Model aircraft flying<br>Ballooning  | Paragliding<br>Hang-gliding<br>Gliding   | Parachute jumping<br>Flying  |
| <b>Aquatic activities</b> | Canoeing<br>Rowing<br>Surfing-Windsurfing<br>Yachting  | White water canoeing<br>Hydrobob<br>Hydrospeed<br>Rafting  | Ravine descent<br>Water-skiing<br>Speedboat racing<br>Jet-skiing<br>River-skiing<br>Diving                     |
| <b>Percentage</b>         | <b>30.74%</b>  | <b>56.29%</b>  | <b>13.17%</b>  |

Source: ECOTRANS

<sup>15</sup> Turismo Rural y Turismo Activo. Francisco J. Melgosa Arcos. Universidad de Salamanca

<sup>16</sup> La Integración del Medio Ambiente en el sector turístico. Francisco J. Melgosa Arcos. Universidad de Salamanca

**TABLE 2**  
**Potential alterations caused by massification**

| Potential alterations               | Environmental elements  |  |  |   |   |  |
|-------------------------------------|---|--|--|---|---|--|
|                                     | Soil  | Vegetation   | Fauna  | Water   | Air and noise environment   | Human environment and landscape  |
| Mountain biking                     | erosive processes in specific parts of bike routes                    | loss of surface vegetation   | .displacement<br>.behavioural changes  | .modification of river balance due to constant wading                         | .considerable increase in noise levels  | .humanisation of environment<br>.abandoned trash<br>.fire hazard                               |
| Camping                             | .erosive processes caused by digging of numerous holes<br>.compacting | .loss of canopy through stamping<br>.damage to trees caused by firewood gathering<br>.collecting | .affects on fauna in area of influence: noise, pollution, changes to behaviour<br>.proliferation of anthropophile species<br>.collecting | .pollution caused by detergents, oils, wastewater and rubbish                 | .considerable increase in noise levels in small area                          | .abandoned trash<br>.fire hazard<br>.humanisation of habitats caused by large numbers of tents |
| Walking and climbing                | .trail erosion<br>.changes to soil properties and structure           | .stamping, formation of trails<br>.destruction of plants<br>.collecting                          | .access possible to best-conserved areas<br>.displaced fauna   | .pollution caused by leakages from septic tanks in mountain shelters          | .increase in noise<br>.smoke from chimneys and burning of rubbish in shelters | .humanisation of surroundings  |
| Rock-climbing                       | .erosion on access roads and walls<br>.dislodged rocks                | .damage to plants at rock-face base and along climbing routes                                    | .populations of birds of prey affected<br>.behavioural changes   |   | .increased noise due to shouts and use of mechanical equipment                | .abandoned trash<br>.humanisation of surroundings  |
| Pot-holing and cave visits          | .plundering of stalactites and stalagmites                            | .alteration of plant diversity due to modification of fragile interiors                          | .alterations to fauna diversity<br>.bat colonies affected  | .groundwater pollution  | .physical-chemical changes in interior  | .abandoned trash<br>.humanisation of surroundings  |
| Equestrian routes                   | .erosion along paths, stopping points and drinking spots              | .roots exposed<br>.loss of surface canopy  | .minor nuisance  |   |   | .abandoned trash<br>.fire hazard<br>.humanisation of surroundings                              |
| 4x4 cars and motorcycles            | .opening of new accesses<br>.erosion on slopes and embankments        | .loss of surface vegetation  | . effects on animals of noise and noxious gases<br>.collisions<br>.fragmentation   | .modification of river balance through wading<br>.pollution by oils and fuels | .increased noise<br>.noxious gas emissions                                    | .loss of quality and nuisance caused by saturation of roads<br>.humanisation of surroundings   |
| Crosscountry and backcountry skiing | .erosion in parts with little snow cover                              | .plants and bushes severed<br>.flowering alterations to herbaceous plants                        | .effects on hibernating animals<br>.displacement of animals  |   |   | .humanisation of surroundings  |
| Paragliding and hang-gliding        | .erosion caused by accesses   | .vegetation destroyed by access routes opened for support vehicles                               | .large mammals and birds abandon habitat<br>.nests abandoned<br>.prey effect   |   | .considerable increase in noise in assembly areas                             | .abandoned trash<br>.humanisation of surroundings  |
| Microflight                         |   |  | .encroachment on bird territory<br>.nests and young birds abandoned  |   | .increased noise  | .inconvenience to nearby populations<br>.humanisation of surroundings                          |
| Motorboats                          | . excavations for jetty construction                                  | .algae and other plants severed by propellers<br>.alteration of photosynthesis processes         | .invertebrates and fish and mollusc gills affected by greater murkiness<br>.noise<br>.water birds affected                               | .discharge of oils, fuel and detergents<br>.increased murkiness               | .increase in noise<br>.noxious gas emissions                                  | .inconvenience to nearby populations<br>.humanisation of surroundings                          |

| Potential alterations | Environmental elements                   |                                   |   |  |                  |                                 |
|-----------------------|--|-----------------------------------|---|--|------------------|---------------------------------|
|                       | Soil                                     | Vegetation                        | Fauna   | Water  | Air and noise    | Human environment and landscape |
| Rowing                | . excavations for boathouse construction | .vegetation destroyed by accesses | .noise<br>.loss of egg-laying by birds and fish<br>.access to time-honoured fauna sites | .increased murkiness<br>.alteration to river bed | .increased noise | .humanisation of surroundings   |

Source: ECOTRANS

The pursuit of sports tourism activities in Natural Areas is regulated by the provisions of the Natural Resource Management Plans and the Use and Management Plans of the respective Areas. Account must be therefore taken of the limitations of the zone and the uses permitted therein.

### 3.5.1. Some forms of active tourism

#### Mountain and winter tourism

Europeans are extremely fond of holidays in mountain regions, the most popular destination being the Alps, where - according to the Austrian Institute of Applied Ecology - mountain hotels accommodate more than 100 million tourists every year, a figure which increases significantly if we include also visitors who do not stay in commercial accommodation. Whereas summer tourism has remained stable in the Alps, winter tourism has multiplied considerably.

In Spain the picture is similar in the Pyrenees and other mountain ranges, where second homes are popular and tourist resorts and installations for skiing and other leisure pursuits have been created.

As mentioned earlier, most tourism in Spain is concentrated in coastal parts and in the islands. Inland areas are therefore less affected by tourism development. However, it should be remembered that mountain regions contain fragile and scarce ecosystems, which are virtually the last bastions or retreats for many endangered species and communities of animals and plants (bears, black vulture, bearded vulture ...). For this reason, along with wetlands, mountain regions were the first areas to be granted protection via the category of Natural or National Parks (*Lagos de Covadonga, Ordesa, Cazorla, Picos de Europa*). Unfortunately this has not prevented mountain zones in general from being exposed to considerable pressure from human activities.



Mountains are fragile ecosystems and are universally important as the storehouses of water for the earth, as areas of biological diversity and also areas of recreation and cultural heritage.

In view of the importance of promoting conservation and sustainable development in mountain zones, the United Nations Food and Agriculture Organisation (FAO) declared 2002 as the International Year of Mountains.

The most habitual negative impacts suffered by mountains include the following:

- Deforestation to make way for ski slopes, access roads and car parks, for which forests need to be cleared. The resulting erosion means that mountain soils and their vegetation are easily and often irreversibly lost. Moreover, deforestation leads to an increase in natural disasters (avalanches, floods...).
- The invasion of natural areas in pursuit of mass recreational activities (camping, walking, climbing, etc) disturbs wildlife and damages vegetation in the area.
- The occupation and fragmentation of the habitat and the nuisance caused to upper-mountain species by the construction of infrastructures and the pursuit of recreational activities endanger the survival of these species and that of the valuable ecosystems in which they live.
- The deterioration of the landscape caused by the proliferation of infrastructures and constructions and the dumping of litter and waste represent a danger to the health of environment.
- Various nuisances (traffic, noise...) are caused.

Skiing is one of the leading mountain sports in Europe. Downhill skiing causes major impacts, due to the amount of land occupied by the slopes, the energy consumed by infrastructure and the effect on upper-mountain vegetation, which is highly sensitive to disturbance. Cross-country and backcountry skiing have less serious effects and are gaining popularity as forms of winter tourism.

Ski lifts, off-piste skiing, all-terrain vehicles and snow compacting disturb endangered and non-endangered species, resulting in fragmentation of the habitat (dividing the territory of a species). This is one of the main contributing factors in the decline and extinction of many species.

Other impacts associated with such pursuits are related to the deterioration of the visual attractiveness of the landscape, loss of habitats and disturbance of endangered species, evacuation of waste water, water pollution, gas emissions (e.g. from vehicle fuel combustion) and the non-sustainable use of water.

As tends to happen, unchecked tourism growth in these areas also leads to social and economic imbalances, causing regional differences and excessive dependence on tourism.

In addition to snow tourism, these installations and amenities also attract summer tourism, which is often a further source of inconvenience to animal and plant life.

Tourism and recreational activities in mountain areas are less concentrated in summer than in the case of winter skiing. Summer visitors tend to go walking or practise sporting activities. On the busiest routes the constant influx of summer visitors can destroy the vegetation and leave deep furrows, increasing erosion. Perhaps the most controversial aspect of outdoor activities is the growing presence of engines (motorbikes, all-terrain vehicles...) and the resulting noise and increase in soil erosion.

### Adventure tourism

This term denotes travel undertaken for the purpose of pursuing a sporting or recreational activity, usually one involving challenges posed by nature. Practitioners are becoming increasingly demanding and seek safer activities in the most attractive spots.

In Spain more and more tourists are choosing to combine a beach holiday with adventure activities and trekking, adding to the demand already generated for such pursuits by tourists whose holiday is solely for adventure tourism. The comprehensive offer available today permits a choice of destination, including many that afford extremely dynamic holidays. Whatever the choice, the possibility of also enjoying days on the beach and night entertainment makes an adventure tourism programme even more attractive.

Spanish companies and associations in this sector are governed by regulations adopted at European Union level and are therefore comparable in terms of safety and risk prevention to their counterparts in other European countries.

Programmes are organised for groups, firms, families or individuals. They cover a range of 4x4 expeditions, canoeing, bungee-jumping, ravine descents and abseiling, assault courses, multi-adventure raids, etc.

There are numerous companies and activities, many of them of a sporting nature: paragliding (in some cases combined with water skiing), ballooning, horse trekking (there are many riding clubs and stables, offering wonderful routes to enjoy the countryside), jet ski excursions (marinas), diving, rock-climbing, parachuting, pot-holing, etc. Information on companies and activities is available from tourist offices.





Walking and mountain-biking remain the most widespread modes among tourists. Highly attractive spots for both these pursuits are plentiful along the coast and also in the interior of the country.

A characteristic feature of these activities is that they allow maximum contact with the natural environment. However, unlike other options such as ecotourism, in many cases they lack the component of respect for the environment in which they are pursued. The negative impact is often associated with the very nature of the activity itself, particularly those involving vehicles, given the unavoidable noise pollution and combustion. Hence the crucial importance of the choice of routes, taking due account of the fauna living in the area and also sensitive periods such as breeding.

In other instances, the impact is caused by the massive audiences attracted by the activities, which is why it is important to bear in mind the carrying capacity of the environment for certain forms of tourism. This is the path taken by ecotourism, the success of which is due largely to the fact that it is aimed at small groups via small tourism companies, thus aiding the development of the local population.

#### Nautical tourism

Other activities associated with coastal tourism that can prove harmful to the environment are aquatic sports, such as diving or jet-skiing.

Diving, especially if accompanied by underwater fishing, can be a serious problem if practised in ecologically-sensitive areas or where there are large concentrations of divers, who can cause nuisance to fauna and damage to plant life or eliminate the few specimens existing in certain coastal parts and prevent their recovery.

Sailing can also lead to environmental problems, a case in point being jet-skis, which are not only dangerous to riders and swimmers but also generate considerable noise pollution, one of the main nuisances for tourists. They are also a source of small oil and fuel slicks, smoke and smells. Pleasure boats and yachts can also generate and discharge waste and litter into the sea, diminishing the quality of the marine and coastal ecosystem. Although some beaches establish separate swimming and boating areas in order to avoid possible accidents, in most cases this in itself does not remedy the aforementioned environmental problems.

Growing demand for nautical tourism has led to the presence of marinas, which have major impacts on the coast and act as a barrier to marine currents and the formation of beaches.

## Golf tourism

Certain recreational pursuits in the Mediterranean area, among them golf courses, give rise to specific environmental problems and require careful planning.

Prior to the 1970s, golf was an exclusive sport. However, the rapid growth since then has led to the construction of many courses. Statistics from the Spanish Golf Federation show that there were 5,000 registered players in 1970. By 1980, the number had risen to 20,000 and in 1992 that figure had tripled, reaching 60,000. By 1997 the number of registered golfers had risen to 100,000.

Golf courses tend to adversely impact on the environment because they involve earth movement, occupation of farmland or forests, destruction of natural surroundings, alterations to hydrological systems (especially in Spain), and draining of wetlands in order to plant grass, etc.

In the case of the golf courses on Spain's Mediterranean coast, the demand for water for irrigation can seriously affect water supply, which is a major problem in the region. The high water requirements of courses have already generated a certain amount of public controversy, given the already limited availability of water for other activities.

The importance should be underlined at this point of the need for integrated planning when deciding whether to build golf courses in tourist areas, in order to safeguard the territory's carrying capacity.

It is vital to ensure that water for golf courses is always obtained by reusing treated wastewater, which is the responsibility of the company operating the course.

A golf course can also cause adverse impacts on the local ecosystem and biodiversity. On islands for example, the introduction of foreign species (palm trees) can eventually lead to the displacement of endemic species.

Lastly, it would be appropriate to check whether guidelines for the construction and sustainable management of golf courses are available.

### 3.6. Health tourism: thermalism and spas

Health tourism affords an alternative to the traditional concept of tourism in that it combines a health-centre component with the tourism and leisure possibilities available in the natural environment in which these centres are located<sup>17</sup>.

The first spas were originally created to help people recuperate their health. In Spain, the Moors and Romans built facilities close to natural springs, which were the source of waters with mineral and medicinal properties that could be harnessed to treat different illnesses.

Spain's great variety and richness of mineral and medicinal waters is a major tourist and social attraction. Spas have ceased to be places solely for the ill and now attract a young and healthy public. The Tourism Strategy and Action Plan put in place by the national authorities offers extensive promotional support for existing spas. Moreover, the Conclusions of the National Tourism Conference in 1997 emphasised the need to improve the quality and definition of products in order to facilitate external marketing.

'**Thermalism**' is the leading activity in a health tourism that is currently enjoying a boom in our country, especially in regions such as Galicia. Thermalism is the therapeutic action of some natural waters on certain illnesses, particularly chronic conditions affecting the locomotor apparatus, or the respiratory or digestive system. Along with thermal water spas, so-called 'cure hotels' also form part of the health tourism offer. These are establishments that provide the professional services and facilities required to promote and enhance the health of their clients.

Spain's White Paper on Tourism (1990) already anticipated that *well-being under medical supervision is a rapidly-growing market which will continue to grow in the future. Spain benefits from a reasonable spa tradition, which could be relaunched successfully as long as the product is tailored to current needs, tastes and preferences.*

Furthermore, the spa offer has been enhanced by the efforts of regional governments in Spain to revitalise and consolidate the use of thermal waters as a tourist resource. Various regions have made funding available for the rehabilitation, renovation and modernisation of installations (for example, Decree 9/1991 of 22 January, on subsidies for the improvement, modernisation, adaptation and construction of spas in Extremadura; Order of 18 May 1987 for the promotion of tourism and thermal resorts in

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<sup>17</sup> Source: "Turismo de salud: Termalismo y Balnearios", Francisco J. Melgosa Universidad de Salamanca. Published in Actas del III Congreso de Turismo. Universidad/Empresa, organised by the Universidad Jaime I de Castellón (Valencia, April 2000)

Andalusia). Another important factor in the success of thermal water facilities has been the so-called ‘Social Thermalism Programme’ initiated in 1989 by the then Ministry for Social Affairs.

According to information provided by the National Association of Thermal Water Facilities (ANET), the situation of the sector in 1998 was as follows:

- 128 thermal water facilities, of which 85 were in use
- 68 facilities with hotel; the remainder offer other types of accommodation or have agreements with hotels etc.
- 12,500 direct and 7,500 indirect hotel beds.
- Approximately 350,000 thermal water users, 100,000 accompanying persons and 70,000 users under the Social Thermalism Programme (around 520,000 in total)

The current number of facilities, by region, according to ANET, is as follows:<sup>18</sup>:

| Region                   | Thermal water facilities  |
|--------------------------|---|
| Andalusia (9)            | San Nicolás, Fuenteamarga, Alhama de Granada, Graena, Lanjarón, Alicún de las Torres, Carratraca and Tolox  |
| Aragón (9)               | Baños de Benasque, Panticosa, Vilas del Turbón, Manzanera, Termas Pallarés, Baños de Serón, Sicilia, La Virgen and Paracuellos de Jiloca  |
| Asturias (1)             | Caldas de Oviedo  |
| Balearics (1)            | San Juan de la Font Santa   |
| Cantabria (3)            | Caldas de Besaya, Liérganes and Puenteviesgo  |
| Castilla – La Mancha (6) | Benito, Tus, Baños de la Concepción, Fuencaliente, Cervantes and Solán de Cabras  |
| Castilla - León (5)      | Corconte, Babilafuente, Ledesma, Retortillo, Palacio de las Salinas; Caldas de Luna and Valdeleiteja.   |
| Catalonia (14)           | Titus, Caldas d'Estrac, Broquetas, Termas Forns, Termas Victoria, Vila de Caldes, Balcafort, Codina, Prats, Vichy Catalán, Termas Orión, Caldas de Boí, Termes Montbrío and Vallfogona de Riucorb |

<sup>18</sup> Asociación Nacional de Estaciones Termales, <http://www.balnearios.org/> (June 2003)

| Region             | Thermal water facilities   |
|--------------------|--|
| Extremadura (5)    | Alange, Fuentes del Trampal, El Raposo, Valdefernando, Brozas and Baños de Montemayor  |
| Galicia (12)       | Baños Viejos de Carballo, Lugo, Arnoia, Baños de Molgas, Carballino, Caldas de Partovia, Acuña, Dávila, Caldelas de Tuy, Termas de Cuntis, Baños de Brea, Mondariz, Lais and Arteixo |
| Murcia (2)         | Archena, Fortuna-Leana   |
| Navarre (1)        | Baños de Fitero  |
| La Rioja (1)       | Arnedillo  |
| Valencia (5)       | Hervidero de Cofrentes, Chulilla, Verche, Montanejos, Fuente Podrida and Agrupación de Balnearios de Villavieja  |
| Basque Country (1) | Cestona  |

If thermal water and spa activities are to be sustainable, an indispensable requirement is rational use and management of water, the precious resource on which the activities depend directly.

### **Galicia and thermalism**

Galicia's position as a leading thermal tourism provider is attested by its numerous facilities. It also has many resources which are as yet are untapped, although plans are underway for them to enter operation in the future.

This form of tourism presents high occupancy levels year-round and is becoming firmly consolidated throughout Galicia. Its essential features are low seasonality, customer loyalty and an optimisation of resources (both human and installations) which justifies the label of quality establishments.

Thermalism in Galicia is a form of quality tourism and what sets it apart from other sectors and establishments is its water.

### **3.7. Business and conference tourism**

Many tourist destinations specialise in the holding of major conferences and congresses. Appropriate infrastructure is accompanied by organisational models that guarantee the success of the events, with an offer tailored to the specific demands of



each occasion. Provision exists also for leisure activities for conference participants and accompanying persons.

Many companies specialise in the organisation of congresses and conventions of varying sizes and the accompanying complementary activities. Enterprises, financial institutions, political parties and social organisations often choose an environment in which their conventions and incentive events are complemented by leisure solutions.

Destinations of this type exist in locations offering excellent communications and accessibility, which are essential if the facilities are to be competitive (proximity to international airports, roads and ports).

Technology resources, varied complementary services, golf courses, attractive natural scenery, good night life, restaurants and leisure amenities (from casinos to discotheques), good shopping possibilities and attractive hotels are some of the requirements of clients of this form of tourism.

The environmental impacts associated with conference tourism are derived from the extensive use of resources, due to the misguided notion that a comprehensive and quality offer requires colossal energy resources. Now that many hotel chains have begun to appreciate the competitive value of 'ecological' services, correct environmental management of hotels and conference venues should be added to the initiative to implement voluntary environmental management and energy efficiency systems, thereby avoiding unnecessary journeys and energy and resource use.

Complementary activities associated with conference and convention tourism might include options for cultural tourism or the interpretation of the venue's surrounding environment, which would help add a component of environmental and cultural awareness.

### **3.8. Cruise tourism**

Cruise tourism is a market segment that has grown substantially in recent years. The number of cruise passengers worldwide rose by 8% annually during the 1990s. Predictions for this form of tourism estimate that the 9.8 million tourists recorded in 2001 will increase to 20.7 million by 2010<sup>19</sup>.

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<sup>19</sup> G. P. Wild (International) Limited, 2001: Implications of Fleet Changes for Cruise Market Prospects to 2010. August 2001. (Referenced in UNEP: Industry as a partner for sustainable development. WTTC, London, 2002).

Statistics provided by Spanish Ports indicate that the trend in Spain is in line with that seen elsewhere in the world. 2,601 cruise liners carrying 2,094,431 passengers visited the country's ports in 2001. In 2002 the number of ships was 2,968, a year-on-year increase of 14.11%; the total number of passengers rose to 2,722,391, an increase of 29.98% compared to 2001.

These figures give cause for reflection on the economic repercussions of the cruise industry. Cruise tourism is often aimed at the segment of the population with high or middle-high income, willing to pay high prices for quality products and services. Cruise tourism impacts directly and indirectly on other activities, such as trade, with the corresponding repercussions on employment levels. However, one has to bear in mind the short length of stays in the ports and cities visited by cruise tourists, compared to other forms of tourism. Moreover, cruise liners usually offer a wide range of on-board services and products (accommodation, restaurants, bars, saunas, gyms, casinos, cinemas, libraries, discos, shops, golf, etc).

Similarly, there is no avoiding the question of the environmental dimension of cruise tourism. The conservation of the marine environment is of crucial importance. The most important impacts caused by this form of tourism are derived from the production and discharge at sea of all kinds of waste and refuse, including hazardous waste (batteries, medicines, photographic material, etc). Given that the liners are veritable 'floating hotels' carrying upwards of 5,000 passengers, sustainable management must include not only minimisation of waste and adequate treatment of any waste generated (recycling, reuse) but also avoidance of dumping wastewater into the sea and the discharges associated with cleaning operations (fuel, detergents). These impacts, which are already evident, inevitably affect the wildlife of the marine environment and the coast and prevent the sea from being used and enjoyed for other pursuits, including those of a tourist nature (swimming, fishing, surfing, diving, etc).

Cruise ships carrying large numbers of tourists for short periods not only generate significant amounts of polluting effluents but they also consume non-renewable energies such as water and require energy to operate. Water and energy, therefore, should be consumed in accordance with rational and sustainable consumption guidelines.

### **3.9. Theme Park tourism**

Theme and leisure parks are becoming increasingly popular as a tourist and recreational activity in both Spain and Europe. A theme park is a communication and

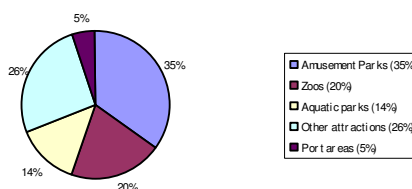
leisure option which is simple and easy to understand for the potential target public and is built around one or more themes. It takes the form of a series of infrastructures and installations which give substance to the ‘theme’ and are deemed attractive to the public. Depending on the degree of explicitness of the underlying educational purpose and the balance between leisure and education, such parks may be classified under different headings, ranging from out-and-out amusement parks to traditional museums<sup>20</sup>.

So-called second-generation parks draw their inspiration from the American parks offering accommodation in a pleasant environment. Just as the 1970s were very much the age of expansion of US theme parks, the 1980s marked the boom period in the rest of the world. Magic Mountain in Santa Clarita Valley (California) opened on 29 May 1971, with much of its grounds taken up by amusement park rides. The formula spread to the rest of the world in the 1980s. Europe and Asia joined the bandwagon and theme parks began to flourish beyond the United States. Old amusement parks invested heavily to reconvert to theme parks and the border between the two types become blurred.

In 2003 the Directorate General for Enterprise of the European Commission published a document entitled “Structure, functioning and competitiveness of European tourism and its enterprises”, in which it classified tourism activities as recreational activities and cultural activities. The former include theme parks and amusement parks. The document analyses the number of visits to such parks in Europe and sets out the data according to a classification of all recreational attractions:

- Amusement Parks
- Zoos
- Aquatic parks
- Other attractions
- Port areas

Visits to recreational attractions (per 1000 visits)



Source: International Association of Amusement Parks and Attractions (IAAPA). 2001

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<sup>20</sup> Antonio E. Ten, Instituto de estudios documentales e históricos sobre la ciencia, (CSIC – Universidad de Valencia). Article published in the journal ARBOR, Consejo Superior de investigaciones Científicas (Spain), vol CLX, pp. 109-131, (1998)





Overall, amusement parks were the most popular type of attraction in 2000, although zoos, safari parks, aquaria, etc were very popular also. In 1999 Europe's theme parks and amusement parks received 110 million visitors. The most visited theme park was Disneyland Paris with 12.5 million visitors. The European Association of Zoos and Aquaria (EAZA) calculates that in 1999 its members received more than 90 million paying visitors and a total of 125 million visitors in all. According to Euromonitor, the European attractions market grew in real terms by 12.1% between 1995 and 1999 and accounted for 16% of revenue obtained by the attractions sector worldwide.

Over the last 10 years, although the number of attractions has increased, this expansion has not been uniform: larger parks have been extended while many smaller ones have closed their doors.

### **Spain**

During 2001 the ten top names in the Theme and Leisure Parks sector received approximately 16 million visits and generated 426 million euros in revenue, an increase of 24% compared to 2000<sup>21</sup>.

The aim of some parks, including the oldest one which is located on the Costa Dourada (Tarragona), is to become self-contained holiday destinations with on-site hotels. Other park management companies have opted to integrate the entire complementary offer in order to improve quality and control. Meanwhile, the need for permanent and heavy investment to ensure that installations retain their appeal is attracting capital from American multinationals, who impose their own operational methods.

### **Impacts**

The idea behind parks such as the above is to extend the tourism season year-round and encourage domestic tourism. However, the parks use up considerable amounts of resources: an average Center Parc is 15km<sup>2</sup> in size and daily consumption per person is 20 kW/hr of electricity, 6 m<sup>3</sup> of gas and 150-180 litres of water (Dobris Assessment, European Environment Agency).

Several aquatic and leisure parks are currently being developed in the Mediterranean area to alleviate the number of coastal visitors. Water consumption by aquatic parks could prove unsustainable for areas that traditionally suffer from a scarcity of water. For their part, leisure parks have extremely high energy requirements.

### **3.10. Other forms**

In addition to the forms of tourist activity described above, there are many others which have not been listed in this section. The constant inter-penetration between some forms and others needs to be borne in mind: far from being water-tight compartments, the frontiers of these activities are not fixed.

Deserving of mention, for example, are other forms associated with specific events that can produce mass movements of tourist product consumers. Examples include sporting events, such as motorcycle races, or music concerts, religious events (Papal visits), etc.

Religious pilgrimages also lead to large concentrations of people at a given site, such as Covadonga or Lourdes, or along a route (the Route of Santiago, for instance).

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<sup>21</sup> Informes de Coyuntura del Turismo en España, La Mesa del Turismo, primer Grupo de Opinión del Empresariado turístico español. (2002)

## **4. GOOD ENVIRONMENTAL PRACTICES IN THE TOURISM SECTOR**

### **4.1. Introduction**

As citizens, stakeholders in the tourism sector play a crucial role when it comes to putting into practice behaviours that respect the environment.

Admittedly, it is difficult to eradicate certain deeply-rooted attitudes. Similarly, institutional support is needed to resolve some of the problems. The tourism sector is perhaps an example of the latter, given that the major negative impacts of tourism (destruction of natural areas due to the mass occupation of a territory caused by uncontrolled urban growth and the unsustainable use of resources such as water) require political and administrative strategies and regulations, an issue which lies outside the remit of this Module. However, it is equally true that our sensitivity as citizens should operate in tandem with that shown by the authorities. If we tire of seeing litter and waste on our streets and footpaths we will insist on bins being provided. If nobody is concerned at dirty streets, no-one will worry about providing the bins needed, which will be pointless anyway if we are not prepared to use them.

In the preceding pages we have outlined a series of inter-relations between tourism and the environment. Quite possibly this preliminary explanation may well suffice to improve our attitude towards the environment. If so, it would be a positive signal for humanity and for the planet...

However, we will also consider some specific recommendations and good practices that can help guide us in adopting personal behaviours aimed at protecting and enhancing our surroundings.

### **4.2. Hotels and restaurants**

#### **4.2.1 Water use**

As already mentioned, water is a scarce and highly precious resource on the Mediterranean coast and in many interior parts of the Iberian Peninsula. Excessive and uncontrolled use has caused, and continues to cause today, serious damage to the environment and to the economy. Water is critical, a precious resource, and its enormous importance must be considered when planning any activity or installation.



Irrespective of the nature or location of the activity, we should endeavour to take from our environment as little water as possible and return it in the best possible condition.

#### **4.2.2. Good environmental practices: water use**

Water consumption can become a major concern if it is not used rationally. The combination of plentiful sunshine, high summer temperatures and lack of rainfall means that in most of the Iberian Peninsula garden and facility maintenance requires water in very large quantities. Add to this the high density of tourism in certain parts and it becomes obvious that demand for water exceeds availability. If we insist on using it limitlessly, we will eventually cause serious harm to the environment.

Below are listed a number of good practices concerning water use:

##### GENERAL GOOD PRACTICES

- Fitting water meters for each area of use will allow the highest consumption areas to be identified and measures introduced to correct excesses.
- Poor maintenance of the drinking water supply network can increase consumption due to losses or leakage.

##### GARDENS, GREEN AREAS, GOLF COURSES AND SWIMMING POOLS

- Amenities with landscaped gardens and green areas can reduce water consumption significantly if drip-feeds or micro-irrigation are used instead of hoses. Watering during the coolest parts of the day helps reduce loss through evaporation.
- Another sound environmental practice is to plant trees for shade. This not only increases user comfort in summer, but also reduces the ground temperature, curbing water loss through evaporation and thus making less frequent watering possible. Consideration should also be given to the installation of rainwater collection systems and to the use of wastewater treated at municipal level or in-house.



- In any case, we should bear in mind that lush gardens and English-style green lawns in a Mediterranean climate require massive amounts of water. Where possible, plant and tree species chosen should be suited to our climate.
- Cleaning paved communal areas using mechanical sweepers instead of hoses helps reduce the amount of water used in this type of operation significantly.
- Swimming pools use enormous amounts of water and maintenance should therefore be optimised to avoid losses or leakage. If possible, excess or drained water should be reused for other purposes, such as for watering gardens.
- The above recommendations are equally valid for golf courses, where low-consumption watering systems should be used and watering times adjusted to minimise evapotranspiration. Plants should have low watering requirements and treated wastewater should be reused.
- A more sustainable approach for watering courses can be found in so-called 'rustic golf courses', where natural vegetation is harnessed for fairways and for the layout of each hole so that only the greens require major upkeep and watering.

#### TOILETS, RESTROOMS AND KITCHENS

- Low-flow devices and faucet aerators in sinks and showers provide adequate wetting strength with less water. The volume of water in toilet tanks can be reduced without detriment to the cleansing action by inserting bottles filled with water (or, better still, sand) or by lowering the float. Alternatively, tanks can be replaced with smaller ones.
- Tanks fitted with devices that adjust the amount of water for each flush, depending on the use made of the toilet, are available on the market. These reduce consumption considerably given that, in most cases, only a short flush is required. However, devices may be different depending on the toilet model and users may be unaware as to how they should be used, which is why a small sticker with instructions should be affixed to the tank also.
- In public restrooms, monobloc taps fitted with timers ensure the taps cannot be left running.



- Water savings can be made in kitchens if vegetables are washed in sinks, basins or bowls instead of under a running tap.

## LAUNDRY

- Daily washing of hundreds of little-used towels and sheets requires large amounts of water. For this reason, the cooperation of tourists should be enlisted to avoid unnecessary changes of towels during long stays.
- If an in-house laundry is used, care should be taken to ensure machines are in proper working order and, when renewed, that they are replaced where possible with low-consumption models. If the laundry service is contracted out to a company, ISO 14001 certification should be considered in the selection process or the company should be required to use modern low-consumption washing machines.

### **4.2.3. Good environmental practices: wastewater**

Just as important as rational water use is the need to ensure that water is returned to the environment in such a way that it causes the least damage and fewest imbalances to health and to said environment. Cleaning rooms, apartments, kitchens, communal areas and exteriors, as well as laundry operations and the disinfecting of restrooms all generate water that is contaminated with cleaning products. Water in kitchens is contaminated by waste (for the most part organic), including used fats and oils, which merit special attention.

Some good practices concerning wastewater are as follows:

## GENERAL

- The best way to reduce the hazards and contamination of wastewater in holiday accommodation and in restaurants is to avoid or minimise discharge of toxic substances via drains and pipes.
- Hotels located in areas where drainage systems cannot be connected to municipal collectors and treatment plants should install an adequate in-house wastewater treatment system.



## CLEANING

- Monitor the types of chemical products used for cleaning and purchase those identified as being the least harmful to the environment.
- When using cleaning products, follow manufacturers' recommendations regarding amounts and thus ensure correct use to avoid greater contamination.
- In-house laundries should use phosphate-free or ecological detergents. In the case of external laundry services, consideration should be given to possible ISO 14001 certification or the type of detergent used.

## KITCHENS

- Used cooking oil is a major source of water contamination and should not be poured down sinks or drains (1 litre of oil can contaminate 100,000 litres of water). Used oils should be disposed of by authorised municipal handlers.
- Detergents used in dishwashers should not contain chlorine or phosphates.

## GARDENS, GREEN AREAS, GOLF COURSES AND SWIMMING POOLS

- Chemicals, herbicides and products which are toxic or dangerous to animals should not be used, given that irrigation and rainwater can cause them to filter through to groundwater or to rivers and streams, causing permanent contamination that can adversely affect human health or the lives of animals that depend on the quality of the water.

### 4.2.4. Energy

It should be recalled that the production and distribution of electricity use up resources (fuels, water...), generate waste and polluting substances (combustion gases, radioactive waste...) and produce other important impacts (loss of fertile soil, deterioration of habitats, nuisance to animals, erosion, deterioration of landscape, etc).

We should also bear in mind that energy production is one of the main contributors to climate change, which in turn is one of the main environmental problems faced by



humanity and can have a very serious impact on tourism (floods in beach zones, storm damage to tourism infrastructures, etc).

Saving on electricity will therefore not only be beneficial to our pockets but will also reduce the extent of the impacts on all the previous links in the electricity production and distribution chain.

Care must be taken with the maintenance and upkeep of machinery and installations. Equipment in poor condition consumes more energy (for instance, a poorly-maintained heating system wastes between 30-50% of the energy consumed). Similarly, poor maintenance of gas pipes can result in higher consumption due to losses and leaks, while dirt and deterioration in air conditioning equipment filters can lead to a dramatic increase in energy consumption.

When designing new buildings or planning renovations, the possibilities afforded by bioclimatic architecture should be considered. A correctly oriented building using new thermal materials can save up to 70% on heating/air conditioning bills and costs no more than an extra 15% to build.

Some good environmental practices:

#### GENERAL

- Implement global planning from the outset for energy needs, the type of energy to be used, the energy characteristics of equipment and installations in order to optimise energy return. For existing installations an energy audit is recommended.
- Consider the possibility of introducing renewable energy sources (wind, solar, photovoltaic, etc) with a view to self-sufficiency. Roofs and outdoor car parks provide ample space to install photovoltaic and solar panels.
- Programme routine inspections of equipment and installations.
- Keep maintenance records for appliances and equipment and monitor maintenance costs of installations and machinery, including waste and emissions generated.
- Significant savings can be made if plumbing installations are inspected for leaks and excessive water consumption caused by malfunctions.





- Obtain precise information on instructions for use and appropriate handling techniques for machinery and equipment. Proper care and use of equipment will extend its shelf-life, save resources and energy, and generate less waste.

## AIR CONDITIONING SYSTEMS

- To avoid excessive energy consumption thermostat controls on individual equipment are advisable. A variation of 1°C can result in a 6% difference in the energy consumed. Temperature should be controlled, if necessary by lowering the general thermostat, to ensure that heating is not too high in winter and the temperature is not too low in summer (not below 22°C).
- Thermal insulation of buildings, particularly windows and piping, contributes significant savings by preventing loss of heat and cool air.
- Periodic cleaning of filters in air conditioning equipment prevents spiralling energy consumption.

## LIGHTING

- Timer switches ensure lights are switched off after a certain amount of time and help save energy.
- Dark shades on lamps reduce the effectiveness of artificial lighting.
- Energy consumption can be reduced by replacing traditional incandescent bulbs with fluorescent tubes or low-energy bulbs.
- Fluorescent tubes in areas where they will be required again in less than five hours need not be turned off, given that the highest energy consumption occurs when switching on.
- Energy can also be saved if garden and exterior lighting is used only when necessary. This can be achieved automatically using simple systems to detect light intensity in the vicinity.



## KITCHENS

- Every time an oven is opened unnecessarily, the temperature drops by approximately 25-50 degrees.
- A fridge or freezer operating at 5°C below the actual temperature required uses 25% more electricity.
- Warm food should not be placed in fridges.
- Iron or stainless steel pots are recommended, given the lower energy requirements of the manufacturing process compared to aluminium pots.

## HOT WATER (SHOWERS, KITCHENS AND HEATED POOLS)

- Hot water can be obtained from solar thermal energy by fitting panels on large unused surfaces in hotels etc.

## TRANSPORT

To avoid unnecessary car hire, clients should be given information on forms of public transport for local travel, particularly to main attractions.

### **4.2.5. Land and landscape usage**

There is no doubt that the most obvious impacts of tourism are related to the transformation and occupation of the land. We have already referred above to the unbridled urban development caused by tourism in coastal areas, as well as the deforestation and habitat fragmentation resulting from mountain tourism.

The destructive occupation and massive changes in land use that come with tourism represent a direct attack on the natural environment, given the transformation and destruction of the habitats of wildlife in the area and the deterioration of the landscape. Urban development of areas close to the sea has led to the virtual destruction of coastal ecosystems along much of the coast, while certain actions in mountain areas are endangering the viability of fragile alpine ecosystems.

Local and regional authorities and technical experts should draw up land use strategies that help protect the integrity of the landscape, as well as ecosystems and the natural and

cultural processes that manifest themselves through the landscape. Destinations should estimate their carrying capacity and act accordingly to adopt the necessary measures to ensure the tourism offer does not exceed this capacity.

It is not hard to understand that the landscape is a key resource for marketing a tourism destination and attracting visitors. It is what the tourist perceives most directly and is a fundamental factor in the choice of destination. Deterioration of the landscape results in a serious loss of quality in tourism. We all prefer typical homes to concrete blocks, the shade afforded by trees to that of uralite roofs, wooded hillsides to litter-strewn roadsides... Destinations are therefore marketed as 'pristine beaches' or 'unrivalled surroundings'. Paradoxically, although tourism depends on the existence of a quality environment and surroundings, tourism itself is the cause of the deterioration.

The best way to use land and landscape in a manner that respects the environment is to take into account, from the design stage of installations onwards, the environmental aspects of the location, spatial distribution and architecture. Many tourism activities take place in installations that have already been built and design improvements are therefore difficult. However, reforms or additional installations are always a possibility, in which case environmental guidelines can be followed.

Some good environmental practices:

- In general, the physical distribution of installations should be adapted to the characteristics of the surrounding area and the occupation of spaces and alterations to natural terrains should be minimised to avoid serious disturbance to topography or natural runoffs. This will help reduce damage to habitats and ecosystems in the area.
- The external appearance of buildings and installations should also be adapted to facilitate their integration in the landscape (urban or natural). Volumes and colours should be in harmony with the surroundings and a smooth transition should be achieved between the surrounding urban or natural landscape and our building. In particular, efforts should be made to use materials and designs evoking traditional local construction and to use the area's indigenous vegetation. All this will considerably enhance the visual and landscape value of our tourism product.
- In addition to exercising care with the physical aspects (occupation of land, movements of earth, vegetation, façades, gardens...) we should also consider other factors such as noise generation and light pollution.

- The introduction of exotic plants in gardens and other green zones, particularly in the vicinity of protected natural areas, can represent a threat to native vegetation, especially endemic and highly sensitive species, due to the airborne propagation of seeds and spores.

#### **4.2.6. Waste and emissions**

Handling and treating the vast amounts of waste generated by modern-day society have become a very serious problem, particularly in the most densely populated areas. According to Spain's National Institute for Statistics, each person generates 1.5 kg of waste every day. In a tourist town with 100,000 people, 150 tons are produced ... every day. This dimensions of this environmental problem often exceed the capacity of managers and treatment facilities and there are as yet no definitive solutions.

A tourism installation produces an extensive assortment of waste. Equipment, food, beverages, maintenance products and other materials purchased all generate packaging and containers (glass, plastic, metal, paper and cardboard). Incorrect maintenance reduces the shelf-life of equipment, adding to spending on parts and increasing waste.

Good environmental practices:

- Buy the required amount of raw materials in appropriate batch-sizes.
- Inspect materials prior to purchase and acceptance.
- Use computerised systems for raw material inventories.
- Promote, and educate staff in, the procurement of ecological products and products packaged in recyclable materials. Staff will need to be familiarised with the symbols used in the market. The most relevant ecological labels are:



- Buy in bulk, since purchases of small quantities increase packaging and wrappings, generating large amounts of waste. Choose products with less wrapping.
- Use and rotate products according to sell-by-date.
- When buying equipment or machinery, it is advisable to study the energy consumption of similar models from other manufactures and also if the equipment contains substances that are harmful to the ozone layer (air conditioning, fridges...). More and more equipment today is environment-friendly.
- Encourage the use of recycled paper for invoices, restaurant menus, envelopes, business cards, etc. White toilet paper is more environment-friendly than coloured paper, which uses dyes and colourings that can contaminate water.
- Remains from pruning and grass-cutting may be separated from other waste for use as compost. Compost is a high quality organic fertiliser which can be used in the gardens of the installation.
- Old towels and sheets can be reused as cleaning cloths. In order to reduce waste, paper towels and napkins should not be used for cleaning.
- It is important for installations to have containers to allow the different types of waste to be separated for recycling (cardboard, glass, packaging, organic materials) or appropriate handling (used oils, light bulbs and fluorescent tubes, toxic product containers, etc)
- Client participation in correct waste sorting is important and hence they should receive appropriate information to facilitate this role.

We should also endeavour to reduce polluting gas emissions, such as those from some types of refrigerators and those generated by the burning of fuels.

Good environmental practices:

- It is important to check air conditioning equipment and refrigerators (large fridges...) regularly in order to minimise emissions given off into the atmosphere, where the equipment uses CFCs or other cooling gases that destroy the ozone layer.
- When purchasing new refrigeration equipment ensure that it uses environmentally-friendly technology.

[Greenfreeze](#) technology does not damage the ozone layer.

- A recommendable environmental option is to replace combustion systems with natural gas, butane or propane for heating, hot water and cooking. Combustion of these gases generates fewer polluting emissions than other fuels such as fuel-oil or coal.

#### 4.2.7. Ecolabels

The fact that sustainable tourism is an evolving concept and economic practice which lacks universally-accepted and established parameters or benchmarks has led some irresponsible businesses to capitalise on the current boom, propitiating what has come to be known as 'Greenwashing' (misuse of the terms 'eco-', 'sustainable' and 'green') and advertising a tourism experience that bears no resemblance to the reality encountered by the tourist on arrival in the destination.

Some ecotourism label programmes, such as *Green Globe* by the World Travel and Tourism Council (WTTC), have been called into question because they sell the right to use the label without requiring or verifying that the recipient is truly committed to improving the environment. The label thus becomes a mere marketing strategy.

Some ecological label programmes, however, are endorsed by official bodies that seek to put in place sustainable development actions and programmes in the field of tourism, as envisaged in the Rio Conference's Agenda 21, the Sustainable Tourism Charter or in other UNESCO programmes for sustainable development and for the conservation and defence of the world's natural and cultural heritage.

The Institute for Responsible Tourism, for example, cooperates with UNESCO and was founded after the World Conference on Sustainable





Tourism (1995) with the objective of managing and promoting sustainable tourism. The Institute awards labels to establishments which are members of the Responsible Tourism System, having verified their compliance with the label's requirements. The name of the Award given is 'Biosphere Hotels'.

There are various categories of Biosphere Hotels:

«*Biosphere Hotels: Responsible Tourism*» is a general label awarded to any hotel wishing to implement a responsible tourism policy, in accordance with the World Sustainable Tourism Charter.

«*Biosphere Hotels: Quality for life*» is aimed specifically at hotels situated in Biosphere Reserves, their buffer zones or in world natural heritage sites.

«*Biosphere Hotels: Heritage for life*» is a specific label for hotels listed as historic or cultural heritage buildings, or for those located in areas of historic or cultural interest or in World Heritage Sites.

«*Biosphere Hotels: Animal Embassy*» is for theme parks where animals are on display and whose objective is to preserve biodiversity «ex situ» through breeding or through «in situ» reintroduction programmes for animal species.

#### **4.2.8. Environment information for tourists**

The success of a 'sustainable' hotel, both commercially and in terms of environmental protection, hinges to a large extent on the awareness, support and good practices of its clients.

For this reason, it is important to provide information via posters, notice boards and other means to explain how the services offered in the establishment help improve the environment. Adequately programmed information on the environment helps convey to guests the reasons behind actions undertaken by the hotel and helps enlist their cooperation.

By way of example, information with instructions on energy and water saving can be placed in rooms, giving guests the opportunity to cooperate in the task of protecting the environment (with the added value of cost savings).

Assisting conservation will help enhance the company image and enable the hotel to present truthful environmental publicity. Consumers, it should be recalled, are increasingly aware of environmental issues and are now more sceptical when they see such publicity, which is why it is important to avoid inaccurate or misleading information since it may well backfire.

#### Sustainable Hotels

*Some hotels have chosen to adopt a series of basic principles based on sustainable development and have implemented environmental measures such as the following:*

- *Planting gardens with native species, respecting the natural orography of the terrain.*
- *A pilot experience known as "ecological breakfasts", designed to avoid using individual portions (butter, jam...) and thus reduce waste.*
- *Savings on electricity (low-energy bulbs), gas and water, with posters reminding clients of the need to reduce consumption.*
- *Treatment of wastewater generated in the hotel. Gardens are watered using treated water.*
- *Local gastronomy is promoted in the hotel restaurants.*
- *Glass bottles are recycled and paper is recycled for use in welcome products and quality surveys.*
- *Selective collection of kitchen oils.*
- *Customer environmental satisfaction is evaluated in the hotels.*

*Source: Ideas and Programmes for Sustainable Tourism, SADAVE 2000 (Assoc. Spanish Travel Agents).*

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### **4.3. Rural and Nature Areas**

#### **4.3.1. Conserving culture and the rural environment**

We should not fall into the trap of considering the natural environment in rural areas as if it were a virgin natural territory. Very few landscapes in Spain and the rest of Europe have remained untouched by human influence. Most rural areas we perceive as “natural” are in fact the result of the balance struck after thousands of years of interaction with traditional farming and animal husbandry. These practices were evolved and adapted by experience down the ages, eventually producing a system that exploited resources in a more or less sustainable manner, enabling the local populations to be self-sufficient for centuries.

Up to the late 19th century the rural environment survived almost exclusively on the basis of farming and stockbreeding. Natural resource management had an overtly ecological component and allowed the population to be self-sufficient even in difficult times. However, at the end of the 19th century and at the beginning of the 20th the equilibrium was broken for various reasons, giving rise to an economic, demographic and cultural crisis that endures today and which has forced a rethink of the future of the rural environment.

Environmental goods, which are clearly very much in demand today, are mostly found in rural areas: landscapes, rivers, lakes, mountains, forests, valleys, archaeological sites, gastronomy and beverages, crafts, traditional architecture, festivities, etc... ‘Ownership’ of these environmental goods could hold the key to the future of the rural environment.

If tourism is to be a future option for the rural world it must be managed using sustainable criteria and must seek to conserve natural, landscape and cultural values.

Some good environmental practices:

OWNERS AND MANAGERS OF ACCOMMODATION, CAMPSITES AND  
RESTAURANTS IN RURAL AREAS

- Preserve the typical appearance of buildings and traditional features of the surroundings to ensure integration with the landscape and with traditional local usage. Roof tiles and slates, stonework, timber and whitewashed fronts, in accordance with local use... All this helps preserve a quality landscape which enhances its tourist and environmental value.
- Acoustic and lighting impacts should not be ignored. Exterior lighting at night has a major impact on the landscape and can disturb the daily cycles and behaviour of animals. In such areas, night lighting is best confined to zones where it is really useful or is needed for security. Any lighting used should be of moderate intensity and face downwards so that it is not visible from long distances or projected skywards.
- Bearing in mind the small populations of rural zones, the arrival of visitors should not produce excessive disturbance due to the unsustainable use of resources and generation of waste.
- Local products and foodstuffs should be used as raw materials in order to support production and -given the reduced need for boxes, packaging and wrapping, etc- generate less waste.
- Many of the water and water saving measures noted earlier are also applicable here, among them the installation of thermal solar energy panels for hot water

#### **4.3.2. Nature tourism**

As mentioned above, most protected natural areas are regulated by planning instruments: Natural Resource Management Plans (PORNs in Spanish), which are occasionally developed in greater detail by a General Use and Management Plan (PRUG) or even a Public Use Plan.

Appropriate zoning of the protected area, depending on the fragile nature of the ecosystems, their carrying capacity and the species present, is vital in such instruments. For each zone the permitted uses will be laid down, along with any prohibitions and uses for which authorisation may be granted, including tourism-related uses and infrastructures. Areas tend to be divided into reserves, and restricted use, compatible use or general use zones.

In order to propitiate tourism activities and channel them towards zones where they will have least impact or will be better tolerated, appropriate provision must be made for infrastructures to inform and advise visitors on how to avoid undesirable repercussions. Infrastructure of this type includes nature interpretation centres, visitors' centres, information panels, sign-posted routes, 'deterrent' car parks, public transport in parts where private vehicle use is restricted, viewpoints, etc.

Generally speaking, interest in nature and the proliferation of adventure sports and other pursuits in natural areas have led to increased use of such areas. Spain has, without doubt, one of Europe's most diverse natural heritages, ranging from spectacular mountains to thousands of kilometres of coast. From near-desert climates to lush forests. Yet there is a distinct paucity of initiatives that use these resources in an integrated manner that respects the environment.

#### **Integrated tourism in Monfragüe**

The Monfragüe Natural Park, in Extremadura, is a protected area of 17,852 hectares of mountains bordering the River Tagus as it winds through the province of Cáceres. One of the best examples of Mediterranean forest, it is home to some of the best-known but most endangered species of Iberian wildlife, including the imperial eagle, Iberian lynx and black vulture.

*Source: Towards sustainable rural development, TERRA environment policy centre.*

We noted earlier that the arrival of visitors and the building of tourism infrastructure can cause degradation in these areas if not carried out a sustainable manner. Given their special characteristics and fragile nature, particular care needs to be exercised when planning recreational pursuits in natural areas, especially those subject to protection or near a protected area, in which case consultation with those responsible for managing the area is advisable.

### **Tourism restrictions on the Medes Islands**

*The sea beds around the Medes Islands (Catalonia) were declared a Marine Reserve in 1990. The declaration has resulted in a spectacular recovery of this natural area. At the same time, an economic activity has emerged, based on tourist visits to the protected area. In 1998, tourism generated over 56 million euros and created 160 jobs.*

*However, with the excessive growth, the ecosystem's carrying capacity has been exceeded and regressions are being detected in coral communities, Gorgoia populations and undersea fields of Neptune grass. As a result, restrictions on visitor numbers have been introduced. A ceiling of 450 divers per day has been imposed, the number of pleasure cruises has been limited and special anchor points have been put in place to prevent private boats from dropping anchor at will, until then a cause of seabed erosion.*

*Source: Towards sustainable rural development, TERRA environment policy centre.*

Tourism activities in the natural environment, from trekking to adventure sports, can cause major impacts and, occasionally, irreversible harm to animal and plant life, especially in the most sensitive parts of protected natural areas. For this reason, activity organisers, guides and instructors should bear in mind a series of recommendations:

### **ENTERPRISES OFFERING NATURE-BASED TOURIST SERVICES AND ACTIVITIES**

- Activities should be correctly planned and coordinated with zoning and other regulations governing the use of protected natural areas. Where necessary, the required permission should be sought beforehand.
- Transit through vegetation recovery zones should be avoided. Signposted trails should be followed at all times and no improvised short-cuts taken.
- Nesting sites should be avoided, particularly during breeding and nesting periods, in order to ensure birds are not disturbed during laying. Noise can be catastrophic, but so too can be the mere presence of visitors for certain species of birds that are extremely sensitive to a human presence during these periods.

- If we do come across a wild animal, we should avoid attracting its attention and refrain from making noise. Stay in parts where we are less visible and under no circumstances offer food.
- Vehicle and boat traffic should be confined to areas away from fauna and aggressive driving or sailing should be avoided.
- The utmost respect should be shown at all times to the inhabitants of rural areas and to their property. Gates on paths should be left as found.
- Fires should not be lit anywhere, except in specifically conditioned and permitted zones. During fire hazard periods, extra care should be taken with cigarette ends, matches, glass and similar objects.
- Litter should be retained until the end of the activity. Even if waste bins and wastepaper baskets are provided in the most visited parts of natural areas, they can be vulnerable and attract wild animals, which is something to be avoided at all costs.
- All materials, vehicles and boats used in outdoor sporting activities should be in perfect condition. Discharge of pollutants (oils, fuel, etc) should be avoided, as should loss of materials (plastics, belts, ropes, etc) since these could prove dangerous to animals if swallowed and could cause them to choke or, if they become entangled in them, to die from starvation or asphyxiation.

#### **4.3.3 Environmental information for tourists**

The attitude, actions, participation and conscious interaction of tourists and visitors directly influence the outcome of their visit. Clients can be given information on a range of things they can do before and during the activity in order to ensure that the experience is consistent with sustainable tourism values and to minimise the negative impacts on the area visited.

Rural tourism establishments and firms offering nature-based recreational activities can prepare good practice manuals for tourists, briefly setting out sustainable tourism

information and recommendations specifically adapted to the area in question. Here are just some ideas:

- For all activities to be undertaken, recommend that tourists choose companies or guides whose activities genuinely respect the environment or the local economy and culture. Remind tourists that some firms and establishments advertise themselves as “ecological” or “green” simply to attract custom.
- Provide information on typical products: food, handicrafts, shops, family restaurants... to help foster the economic development of the rural area.
- Prepare the activity or trip: provide information to tourists on the areas to be visited, and on their natural, historic/cultural and ecological characteristics. Explain that the experience will prove more satisfying if approached with learning, as opposed to merely observing, in mind.
- Be flexible as regards expectations: if activities are approached with an open mind there will be no disappointment. Plans have to be changed at times and opportunities arise for a more detailed knowledge of an aspect of the surroundings or for an interesting cultural experience.
- Preserve resources. Rural tourists should be informed so that they are aware of the resources they consume during their visit or activity. In this way, their presence will not lead to excessive use of sensitive or scarce resources.
- Cause the least possible environmental impact. We should help tourists share in the good practices recommended to organisers, guides and instructors in the previous section. In particular:
  - Do not leave behind litter of any kind (water bottles, plastic bags, paper...) and, if possible, collect up any litter left by other visitors.
  - Do not collect objects or plant/animal products if you do not know the potential impact. Take extra care with any endangered or protected species in the area. Plants growing in the wild should not be uprooted. Many are protected and their removal could constitute an offence.
  - Take extreme care with fire.

- Do not disturb wildlife by attracting animal's attention, offering food, etc.
- Private vehicles used for driving to the activity should be parked correctly in appropriate places and should not be an obstacle to livestock or farm vehicle access.

## 5 TOURISM AND ENVIRONMENT: REGULATORY FRAMEWORK AND POLICIES

It is far from easy to put in place policies and regulations to reconcile nature conservation and sustainable tourism. Tourism is a complex sector encompassing different sectorial policies (transport, regional policy, land use planning, etc) and an integrated policy can therefore prove difficult.

Despite these difficulties, the growing scale of tourism and its significant repercussions on the environment and on the socioeconomic development of many regions have led to an increasing number of initiatives aimed at implanting a rational management model which is respectful of the environment.

The adoption of a sustainable development model for human activities, including tourism, is now a policy priority for the United Nations and other world organisations, and also one of the fundamental pillars of the European Union construction process.

### 5.1. Tourism and Environment: international policies

The **United Nations Conference on Environment and Development** ('Earth Summit') held in **Rio de Janeiro in 1992** marked the definitive establishment of the concept of sustainable development, according to which economic and social development must be addressed in a manner that respects the environment and the needs of future generations.

Among the declarations and documents to emerge from the Rio Summit, of particular importance was the **Plan of Action on the Environment**, better known as **Agenda 21**, which was adopted by 182 countries. Agenda 21 contains a plan for action at world, national and local level to be implemented in different sectors and activities, in order to guarantee the sustainable future of the planet.

In addition to Agenda 21, the *Commission on Sustainable Development* was created to ensure compliance with the agreements reached at the Rio de Janeiro Conference. In the Commission's work programme for the period 1998-2002, governments were urged to draw up national strategies and policies for the development of sustainable tourism



on the basis of Agenda 21 and the tourism industry was recommended to devise forms of tourism which are compatible with the environment and which foster ecological and economic efficiency.

Another key event was the **World Conference on Sustainable Tourism** held in **1995** on the island of Lanzarote under the auspices of the UN, the European Union and other institutions. The Conference led to the adoption of the **Sustainable Tourism Charter**, whose 18 principles include recognition of tourism as an ambivalent activity, due to the fact that it can bring major socioeconomic and cultural advantages but can also contribute to the degradation of the environment and to a loss of local identity.

**2002** was designated by the United Nations as the **International Year of Ecotourism**, to reflect the growing importance of ecotourism not just as a sector of great potential for economic development (particularly in remote zones lacking other possibilities) but also as a powerful instrument for the conservation of the natural environment, if planned, developed and managed properly.

#### **2002 International Year of Ecotourism**

Of the many activities organised at world, regional, national and local level to mark the International Year of Tourism, the most important was the World Ecotourism Summit held in Quebec (Canada) in May 2002.

Prior to the Summit, no truly integrated attempt had been made to disseminate the results obtained in this area or to combine them to produce the synergy required to guarantee the economic, social and environmental benefits envisaged from ecotourism. The Quebec Summit served to intensify cooperation between the tourism sector, governments, the local population and tourists themselves, giving new impetus to the objectives of sustainable development and environmental protection set out in Agenda 21.

*Sources: World Ecotourism Summit– Quebec 2002. Resolution 1998/40 of the Economic and Social Council, United Nations.*

## **5.2. Tourism and Environment: European policies**

The Treaty on European Union lists as a main policy objective the promotion of a sustainable development that respects the environment. However, the Treaty lacks a specific chapter on tourism. There is, therefore, no tourism policy as such in the European Union, although by virtue of a provision included in the Maastricht Treaty the Union can adopt, within its other policies, guidance and development measures for tourism.

In this way, the EU applies to the tourism sector the provisions on free movement of people, goods and services, as well as those governing small businesses and regional policy. Clearly, the economic importance of tourism fully justifies the concern of the European institutions for the sector, even if a legal basis does not exist.

As of the 1980s the European Community initiated a series of specific actions in the tourism sector. The first Council resolution on a Community tourism policy, in 1984, recognized the sector's importance for European integration and asked the Commission to submit policy proposals. Later, in 1986, a Council Decision established the Advisory Committee on Tourism, which Member States were obliged to consult.

At the request of the Commission, 1990 was declared European Year of Tourism. The Year aimed to promote, among other objectives, a better seasonal and geographical distribution of tourism, respecting the quality of the environment and encouraging the staggering of holidays and the development of alternatives to mass tourism.

In 1991 the Commission approved the proposal for a Council decision on a *Community Action Plan to assist Tourism*, aimed at strengthening ties between tourism and the environment through a series of measures (codes of good conduct for tourists, awards for environmentally viable projects, support for environmental tourism pilot projects...).

In **1992**, the **V Community Programme of Policy and Action in relation to the Environment and Sustainable Development** was adopted, under the heading 'Towards sustainability'. The Programme set out the need to integrate the environment in all sectorial policies of the European Union and its Member States. 5 basic sectors were chosen for the implementation of sustainable development policies: Industry, Energy, Transport, Agriculture and Tourism.

In 1994, the European Parliament's Resolution on tourism in the approach to the year 2000 stated that "tourism should be considered a strategic priority for economic development and, as an industry, should be financed by the Community budget, as corresponds to its importance for economic growth, employment and economic and social cohesion, provided that it is respectful of its surroundings". In order to stimulate debate on the sector, the Commission later published its *Green Paper on the role of the EU in Tourism*.

In 1998, Decision 2179/98/EC of the Parliament and of the Council (24 September) revised the 5th Programme and laid down the priority objectives for the **VI Programme**

**of Action**, which was adopted with the title *Environment 2010: our future, our choice*.

Its priority objectives include:

- Periodic exchange of information on the repercussions of tourism practices on the environment.
- Support for awareness campaigns to promote a use of tourist resources that does not harm the environment.
- Promotion of sound innovative practices in the area of sustainable tourism, particularly through pilot projects included in existing financial instruments.
- Encouragement of the inclusion, where appropriate, of environment and tourism issues in international agreements.

In the VI Programme the Commission has decided to set in motion a special programme aimed at architects, public officials, planners, developers, ecology groups and private citizens to encourage best practice in urban land use planning and the development of sustainable towns and cities. The programme will focus on the creation of best practice networks to support the transition to sustainable urban development, in order that the creation of networks of tourist destinations may foster the exchange of ideas and good practice on sustainable forms of tourism.

Furthermore, in view of the tourism's contribution to regional development, Europe has subsidised many actions to improve the environment and to promote sustainability in the tourism sector through the **Cohesion Fund** and the **Structural Funds**, particularly the European Regional Development Fund (ERDF) and the European Agricultural Guidance and Guarantee Fund (EAGGF). For example, many important rural tourism initiatives have come about throughout Spain through the Leader programmes, which are subsidised by the EAGGF.

### **Improved services for tourists and residents**

*With financial support from the European Regional Development Fund (ERDF), Malaga has carried out a series of initiatives aimed at helping tourists and visitors feel more at home in the city.*

*98 police officers have received over 1,900 hours of basic instruction in English, French and German in order to be able to help and advise tourists more effectively. The services sector has been improved also, both for tourists and for the local population. Numerous bars, cafés, bookshops and clothes shops have benefited from funding or incentives to modernise customer services, signs, fittings, to improve security, etc..*

*Source: Regional Policy– Inforegio, European Commission.*

In its Communication ‘*Guidelines for sustainable agriculture*’, the Commission emphasised tourism’s potential to help diversify economic activities, especially in areas where agriculture is in decline.

### **The inland alternative**

*With the support of the European Regional Development Fund (ERDF), the regional government of the Balearic Islands has restored rural dwellings for tourism use. Tourism had been entirely coastal until the emergence in the past three years of this rural and interior initiative, which has partly helped curb the exodus of the rural population caused by the lack of opportunities. Since the rural tourism programme began in 1991, 100 new jobs have been created directly and some 500 indirectly. The tourism offer in inland parts of Majorca has risen by 50%.*

*Source: Regional Policy – Inforegio, European Commission*

The Commission guidelines on the Structural Funds and Cohesion Fund for the period 2000-2006<sup>22</sup> consider that there are several sectors whose potential for job creation is very important, although this potential has been under-exploited to date. Among those mentioned specifically is *quality sustainable tourism*.

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<sup>22</sup> Opinion of the Committee of the Regions on the Structural Funds and coordination with the Cohesion Fund – guidelines for programmes for the period 2000-2006. OJEC C 51, 23-2-2000 (2000/C 51/18)

Another illustrative document with respect to Europe's environment policy in relation to tourism is the **European Charter on Sustainable Tourism in Protected Areas**. The Charter is a plan for best practice relating to sustainable tourism in protected areas. It commits signatories to adopting a working method based on the principle of collaboration between the management authority, tourism entrepreneurs with undertakings in protected areas, tour operators and other local actors, with the aim of protecting and enhancing local heritage, controlling the number of visits and increasing the quality of services.

### 5.2.1 Community legislation

- Communication by the Commission on Preliminary Guidelines for a Community Tourism Policy (COM (82) 385 final).
- Council Resolution, 10 April 1984, on a Community Tourism Policy.
- Council Decision 86/664/CEE establishing a consultation and cooperation procedure in the field of tourism (22 December 1986).
- Council Decision 89/46/EEC (21 December 1988) on a programme of actions for the European Year of Tourism (1990).
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.
- Council Directive 96/61/EC on integrated pollution prevention and control.
- Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy.
- *Commission Communication* to the Council, European Parliament, Economic and Social Committee and Committee of the Regions entitled "*Working together for the future of European tourism*". (COM(2001) 665 final)
- Regulation (EC) 761/2001 of the European Parliament and Council of 19 March 2001, allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), which updates Council Regulation 1836/93/EEC of 29 June 1993, allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme
- Council Resolution of 21 May 2002 on the future of European tourism (2002/C 135/01)
- Decision 1600/2002/EC of the European Parliament and Council of 22 July 2002, laying down the Sixth Community Environment Action Programme
- Commission Decision 2003/287/EC of 14 April 2003 establishing the ecological criteria for the award of the Community eco-label to tourist accommodation services.

### 5.3. Tourism and Environment: Spanish legislation and policies

In Spain, legislative competence for tourism rests exclusively with the regions ('Autonomous Communities'), although it should be noted that the State is competent for certain areas that affect the sector, such as foreign trade, coasts, basic environment legislation, etc. These state competences are exercised through a series of bodies (Directorate General for Tourism, Spanish Tourism Institute) formally ascribed to the Ministry of the Economy. Among the actions undertaken by such bodies, the publication of the White Paper on Spanish Tourism (1990) deserves mention.

Most Autonomous Communities have their own Tourism Planning Laws and are developing sustainable tourism strategies as part of their tourism policies, as well as valuating their natural resources as a tourist attraction.

Concern to protect the environment from the negative impacts of tourist activities had already led to the adoption of low-level legislation, particularly on rural accommodation and tourist campsites. However, the passing of the Tourism Planning Laws marked the first explicit inclusion of sustainable tourism principles and the emergence of tourism planning instruments that take account of environmental variables.

The **Integrated Quality Plan for Spanish Tourism** established by the Office of the Secretary of State for Trade and Tourism (Ministry of the Economy) for the period 2000-2006 includes a series of measures to support and improve tourism quality. Among these are the so-called **Tourism Excellence and Energisation Plans**, which provide for investment in studies of the environmental repercussions, application of Agenda 21, recuperation of natural areas, landscaping, provision of special waste collection points, rehabilitation of heritage... and, generally, actions to improve quality in selected pilot destinations which will serve as exemplary sustainable tourism models for similar destinations.

For its part, the **Sustainable Tourism Town** programme aims to provide tourism towns with a model for environment management based on Community Regulation 1836/93 (EMAS). This Regulation was designed originally to help companies in the industrial sector to attain environmental objectives, but was later extended as an experiment to the tourism sector. It was revised in 2001 and the decision was taken to extend it to all economic sectors, as well as local authorities.

Regarding protected areas, 1989 saw the enactment of *Law 4/1989*, of 27 March, on the **Conservation of Natural Areas and Wild Fauna and Flora**. The protection

granted by the Law was extended beyond protected natural areas by virtue of a new management instrument, known as **Natural Resource Management Plans** (PORNs in Spanish).

#### **“PORNs” and “PRUGs”**

*The basic planning instruments for protected natural areas are the Natural Resource Management Plans (PORNs). These provide a diagnosis of the conservation status of the natural values characteristic of the protected area concerned and determine the zones and ecological processes, both inside and outside the Park, that affect the elements to be protected. On the basis of this diagnosis, restrictions and levels of protection are established or policy criteria drawn up. The PORNs are, therefore, the basic elements that enable conservation objectives to be reconciled with sustainable development in protected natural areas.*

*The general guidelines set out in the PORNs are then carried forward in greater detail by the Use and Management Plans (PRUGs). These instruments for the direct management of the Park lay down the general rules governing use and management in accordance with the framework established by the PORN.*

A ruling by Spain’s Constitutional Court led to the adoption of Law 41/1997, of 5 November, amending Law 4/1989 and establishing a new planning and management model for National Parks to allow participation by the Autonomous Communities. Under this Law the **Management Plan for the National Parks Network** was also created.

The Plan serves as a template for the preparation of PRUGs for National Parks. It also contains guidelines and a programme of actions for public use and visitor services. The aim is to adapt the degree of use of a protected area to its capacity to receive visitors and also to facilitate visitor enjoyment of the Park’s values in a manner compatible with their conservation and with maximum protection of resources.

Similarly, networks of Natural Parks exist in several Autonomous Communities to regulate public use and the exploitation of protected natural areas as tourist resources, in accordance with regional legislation and environmental policy.

#### **5.3.1. National legislation**

- Law 16/2002, of 1 July, on integrated pollution prevention and control..
- Law 6/2001, of 8 May, amending Royal Legislative Decree 1302/1986, of 28-6-1986 (RCL 1986\2113), on Environmental Impact Assessment



- Water Law 46/1999, of 13 December.
- Waste Law 10/1998, of 21 April.
- Royal Decree 1997/1995, of 7 December, establishing measures to help guarantee biodiversity through the conservation of natural habitats and flora and fauna.
- Law 4/1989, of 27 March, subsequently amended by Laws 40/1997 and 41/1997, on the conservation of natural areas and of wild fauna and flora.

### **5.3.2. Regional legislation**

- Law 19/2003, of 14 April, approving General Planning and Tourism Planning Guidelines for the Canary islands.
- Tourism Planning Law 7/1995, of 6 April (Canary Islands)
- Tourism Law 6/2003, of 27 February (Aragon).
- Law 7/2003, approving the Regional Tourism Law (Navarre).
- Tourism Planning Law 1/2003, of 11 February, amending Law 1/1999, 12-3-1999 (LCM 1999\146, 215), (Region of Madrid).
- General Tourism Law 9/2002, of 12 December, amending Law 2/1999, 24-3-1999 (LIB 1999\72) (Balearic Islands).
- Catalonia Tourism Law 13/2002, of 21 June.
- Law 7/2001, of 22 June, on the Regulation of Tourism (Asturias).
- Law 2/2001, of 31 May, approving Tourism Regulations for La Rioja.
- Law 12/1999, of 15 December, approving Tourism Regulations for Andalusia.
- Tourism Planning Law 8/1999, of 26 May (Castilla La Mancha).
- Tourism Planning Law 5/1999, of 24 March (Cantabria).
- Tourism Promotion and Planning Law 3/1998, of 21 May, (Region of Valencia).

- Tourism Planning Law 10/1997, of 19 December (Castilla-León).
- Law 11/1997, of 12 December, approving Tourism Regulations for the Region of Murcia.
- Tourism Promotion and Planning Law 9/1997, of 21 August (Galicia).
- Law 2/1997, of 20 March, approving Tourism Regulations for Extremadura.
- Tourism Planning Law 6/1994, of 16 March (Basque Country)