



**UNIVERSIDAD DE JAÉN**  
*Departamento de Economía*

**ADAPTIVE TOURISM MANAGEMENT  
OF PROTECTED AREAS. A NEW  
MODEL FOR NATURAL PARKS OF  
ANDALUSIA (SPAIN) THROUGH  
CHAOS THEORY**

Juan Ignacio Pulido Fernández<sup>1</sup>

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Dirección para comentarios y críticas:

UNIVERSIDAD DE JAÉN  
Departamento de Economía  
Edificio D-3. Despacho: D3-273  
Campus de Las Lagunillas, s/n  
23071 Jaén  
[jipulido@ujaen.es](mailto:jipulido@ujaen.es)

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<sup>1</sup> Área de Economía Aplicada. Departamento de Economía. Universidad de Jaén.



## **SUMMARY**

Traditionally, the modelling of tourist destinations has been based on the principles of Newtonian theory i.e. systems possess a simple structure and the relationship between the variables tends to be linear or quasi-linear. Thus, systems tend towards equilibrium and external differences or influences are considered as exceptional. This theory has produced the so-called Newtonian-Cartesian models: tourist travel models, structural models, evolutionary models and holistic models regarding the competitiveness of destinations.

Chaos and Complexity Theory argues that the tourism system is a dynamic, complex and unstable system, and external differences or influences are seen as a strength which gives them the capacity for adaptation. Thus, authors such as Russell and Faulkner, McKercher or Farrell and Twining-Ward, among others, maintain that each element of the model is connected to the others, not only directly, but also indirectly, meaning that the alteration of any element will produce a change in the state of the system. It is therefore necessary to define the interests and role of each of the agents and the relationships among them, attempting to synthesize them in a way which allows the continuous adaptation of the destination to the changes in each of the agents and guarantees its efficient management.

Andalusia, in the south of Spain, possesses more than 1.4 million hectares which are protected as natural parks, a total of 24, representing almost 50% of the land area protected in this way in the whole of Spain. Some of these receive more than 700,000 visits per year, a considerable demand for tourism-recreation, and one which will increase in the near future, to judge by the forecasts made by the World Tourism Organisation for ecotourism. Currently, however, the Andalusian public administration lacks a policy of active tourism management for the natural parks;



this, in the long-term, may have a significant negative impact upon the territory and upon the image of such areas as tourist destinations.

Given this situation, and employing Chaos and Complexity Theory, this study proposes an adaptive tourism management model for the Andalusian natural parks; it is based on the acceptance of uncertainty as the working environment and on the progressive accumulation, through a participatory process of social education, of the sufficient knowledge for the understanding of the changes which have been occurring and for systematic reaction to such changes, both adapting to and benefiting from the new situation. To achieve this, the first step is to review the principal contributions made by chaos theory. Subsequently, the principal characteristics of the Andalusian natural parks as tourist destinations will be analysed and, finally, the proposed model, defined by a Delphi analysis performed with a group of experts and a questionnaire offered to the current managers of these areas, will be presented.

**KEYWORDS:** natural parks, Nature-based tourism, policy on tourism, adaptable tourism management, sustainability, Chaos and Complexity Theory



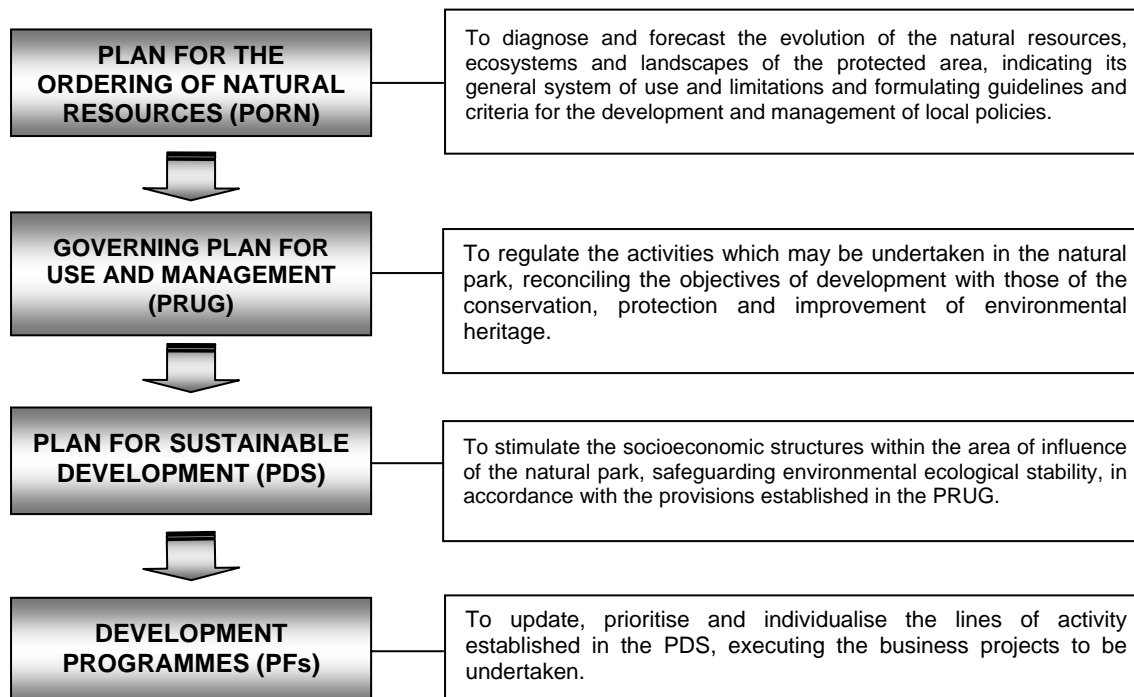
## **I. TOURISM MANAGEMENT OF THE NATURAL PARKS IN ANDALUSIA: CURRENT SITUATION AND RESEARCH APPROACH**

### **I.1. The Andalusian model for the protection and management of natural parks**

The Andalusian model for the protection and management of protected areas, especially natural parks, demonstrates a clear intention to go beyond the simple conservation of specific species of fauna and types of flora. The concept of protected area as a zone free from all human interference is changed by this legislation to the understanding of the territory as the result of millennial anthropic activity. Today, natural landscapes are simply the result of the intervention of humankind in the dynamics of natural systems. It is the nature of this intervention, and not the mere intervention itself, which may threaten environmental conservation. Thus, the preservation of ecosystems and the development of concrete strategies and measures should take place at the same level, in order to achieve harmonious and environmentally respectful development within the protected territories. Thus, the regional public administration is given adequate administrative and legal instruments (see Diagram 1), if the necessary political will exists, to achieve the objective of overcoming the historical contradiction between economic development and resource conservation.



**Diagram 1**  
**Legal instruments for the planning of natural parks in Andalusia**



Source: Author's elaboration.

It is important to note that, when choosing the management model for the natural parks, the Andalusian Regional Government selected that which offered unified management i.e. the unification of environmental action, through the concentration of competencies in this field within a single administrative body (see Diagram 2). The Regional Ministry of the Environment, in turn, appoints a Protected Area Manager for each natural park, with the prior approval of the Management Council, which, together with the Protected Area Manager, comprises the management body of the natural park. The Protected Area Manager designs the annual programme of activity and the budget which, once approved by the Management Council, he or she must carry out in collaboration with his/her team of technical experts and environmental agents. The Management Council has gradually become a collegiate body for participation, advice and collaboration for the Protected Area Manager and the Provincial Delegates of the Regional Ministry. It is a forum for regular discussion in which all ecological, economic and social issues pertaining to the natural park are compared and examined.



**Diagram 2**  
**Management model for the Andalusian natural parks**



Source: Author's elaboration.

Finally, when analysing the Andalusian model for the protection and management of protected areas, and especially natural parks, at least a brief mention must be made of the role of the Development Manager, established by Andalusian Law 2/1989. The Development Manager, designated by the Andalusian Development Institute (IFA, today named the Andalusian Innovation and Development Agency), was entrusted with executing the Development Programmes (PFs), designed by the Institute itself in accordance with the lines of activity established in the Integrated Development Plan (PDI). The post is, therefore, one clearly aimed at socioeconomic stimulation, whereas that of Protected Area Manager is more obviously conservationist. However, the non-existence of the PDI and the PFs and, consequently, the lack of definition of clear objectives to shape the activities of Development Managers in the natural parks meant that this post became less significant as time passed, and thus it has been the Protected Area Manager who has assumed such functions of economic stimulation, which traditionally were subordinate to the primary tasks of protection and conservation (Mulero, 2002: 145-146).

The initiation of a new planning process, starting from 2002, with the successive establishment and execution of the Plans for Sustainable Development (PDSs) in all the Andalusian natural parks, has meant that Promotion Management has regained its importance, although this time at the provincial level, as it will



oversee the execution and development of the PDSs. However, such reincorporation has not significantly changed, at least until now, the basic decision-making structure for such areas, which continues to be the responsibility, to a large extent, of the Protected Area Managers.

## I.2. The need for active tourism management in the Andalusian natural parks

The quantity and diversity of the Andalusian natural parks (24 in total, almost 50% of the land area thus protected in the whole of Spain), make this Autonomous Community a privileged territory for the pursuit of all types of nature-based activities. Moreover, changes in the holiday patterns of tourists, a greater awareness of questions related to environmental conservation, the increasing preference for a healthy lifestyle and playing sport, etc., are having a highly positive influence upon the development in Spain of ecotourism, which takes place principally in the national and natural parks (Pulido, 2005b), and thus Andalusia is a region with tremendous potential in this respect, as shown by the more than 4.5 million tourists who visit the Andalusian natural parks each year (Pulido, 2005a).

Thus, tourism has become an essential tool for the socioeconomic development of the municipalities in such zones and their areas of influence but, in turn, this increases the potential risk of negative impacts upon the conservation of the natural and cultural environment of these zones, especially as a result of inadequate management of their development as tourist destinations.

Currently, the rapid development of tourism in the Andalusian natural parks means it is not enough to simply guarantee the protection of nature and the environmental benefits and services which this brings to society as a whole (for example, by guaranteeing their public use); instead, this rising level of tourism demand requires the provision of these areas with the necessary instruments and the optimisation of the resources they have at their disposal in order to guarantee the quality of visits, in terms of both user satisfaction and the conservation of the resources which make them tourist attractions. It must be remembered that the principal elements which attract flows of tourism are the values of the protected area,



and thus their protection must be the first aspect to be taken into consideration by those who benefit from their development. It is necessary, we can conclude, to implement the active and sustainable management of these zones, one which guarantees their protection and at the same time favours their competitive market position, in order to convert them into authentic tourist destinations. In addition, the rising quality of demand and the advanced degree of tourism development of some of these natural parks require that their management be undertaken by professionals in the tourist sector.

Consequently, the objective of this study is to define a model of active and adaptive tourism management for the Andalusian natural parks, based on the acceptance of uncertainty as the working environment and on the progressive accumulation, through a participatory process of social education, of the sufficient knowledge for the understanding of the changes which have been occurring and systematic reaction to such changes, both adapting to and benefiting from the new situation.

### 1.3. Methodology

This study has employed two databases, expressly constructed for its purposes on the basis of two techniques which in turn are applied to two groups of experts with very different characteristics. The first source of primary information results from a Delphi study (Table 1) undertaken with regional and national experts, with extensive knowledge of the various aspects which characterise the processes of tourism development in the Andalusian natural parks and, in the majority of cases, of the rest of Spain as well. The objective of the Delphi study was to obtain an external and presumably objective overview of the characteristics of these processes, the principal obstacles and challenges they face and possible policies to tackle this situation with a guarantee of success. In addition, we wanted to know the opinion of experts regarding the possibility of completing the organizational flow chart for these areas by the introduction of the figure of tourism manager, and what could or should be his or her functions. For such research, the experts were personally contacted,





and e-mail was used to facilitate the sending of the questionnaires and the collection of data.

**Table 1**  
**Technical specifications of the Delphi study**

<b>Study scope</b>	Regional and national experts in ecotourism, experienced in the processes of tourism development in the Andalusian natural parks
<b>Sample size</b>	17 questionnaires in the first round 13 questionnaires in the second round
<b>Date of the empirical research</b>	Start: 19 June 2003 End: 30 August 2004
<b>Type of study</b>	<i>Delphi</i>

Source: author's elaboration.

The second source of information was a questionnaire sent to the Protected Area Managers of the Andalusian natural parks (Table 2), which was intended to discover the perception of the technical experts who possess greater decision-making capacity in the management of such areas, in addition to other questions regarding their current management, related to their use for tourism and recreation. Additionally, in this case, we were interested in their opinions regarding the possibility of introducing the figure of tourism manager. Such opinion is decisive, since it may shape the final proposal for our model, as the misunderstood introduction of this new figure may generate continuous friction with the Protected Area Managers. Thus, for the results of this study it was very important to be aware, from the beginning, of the attitude of the Protected Area Managers towards such proposals. In short, it was essential to discover if, in general, there exists a favourable (receptive) disposition on their part to the introduction of approaches, techniques and professionals dedicated to the management of tourism in the Andalusian natural parks for which they are responsible or, on the other hand, the atmosphere is hostile and there is opposition to any action which implies the recognition of the increasing interest regarding tourism and recreation in such areas. This questionnaire was also sent by e-mail and was answered by the technical experts of the 24 natural parks.



**Table 2**  
**Technical specifications of the questionnaire completed by the Protected Area Managers of the Andalusian natural parks**

<b>Survey population and scope</b>	Protected Area Managers of the twenty-four Andalusian natural parks
<b>Sample size</b>	24
<b>Date of the empirical research</b>	Start: 3 February 2004 End: 30 April 2004
<b>Type of study</b>	Structured questionnaire sent by e-mail
<b>Sample error</b>	0%
<b>Confidence level</b>	100%
<b>Computer programme used</b>	SPSS for Windows, version 11.0

Source: Author's elaboration.

The majority of the information gathered by both techniques, and stored in the corresponding databases, is qualitative. Traditionally, quantitative information has been considered to be more robust, yet it may produce limitations in certain studies (Pizam and Mansfeld, 1999: 309) such as ours. Moreover, as Strauss and Corbin (1990: 19) state, "qualitative information is gathered (...) in fields which are concerned (...) with human behaviour and functioning", as is the case here. Furthermore, qualitative research is currently benefiting from the continual innovations taking place, thereby improving analysis (Richards and Richards, 1998: 242).

It is also important to emphasise that various identical questions were included in the first round of the Delphi study and in the questionnaire supplied to the Protected Area Managers. This was an attempt to discover the degree of convergence or divergence between the two survey groups (some with an external vision, perhaps more closely associated to research and planning, and, *a priori*, more susceptible to the processes of tourism development, and others with a vision, also *a priori*, more subjective and environmentalist, even protectionist, linked to day-to-day management, to real decision-making affecting the future of the natural park) with regard to specific topics which we considered to be of interest for our future proposals, as will be analysed later.

Once the questions had been constructed and the structure and sequence of the questionnaire defined, a test was performed prior to its definitive employment. This test, or pre-test, which permitted various questions to be modified and some



new ones to be added, was useful for the definitive design of the questionnaire. The pre-test was performed with a small number of persons belonging to the study group, to which were added various researchers or experts in the study subject.

Once the corresponding database was ready, the empirical study was performed, using the following statistical variables: arithmetic mean, median, mode, interquartile range and standard deviation.

## **II. PLANNING AND MANAGEMENT OF TOURIST DESTINATIONS EMPLOYING CHAOS AND COMPLEXITY THEORY**

The traditional approaches to the planning and management of tourist destinations have been based on the principles of stability, equilibrium and the possibility of prediction, in order to construct models in which tourism can be predicted and, consequently, controlled. Thus, any negative impact of tourism is the result of a failure in the planning process, due to a lack of information or the absence of an adequate analysis of all the relationships which occur among the components of the tourism system.

According to the traditional paradigm, tourist systems function like machines, in accordance with the Newtonian theory of physics (McKercher, 1999; Russell and Faulkner, 1999), in which stability, order, uniformity and equilibrium are the norm, in a state seen as harmonious, while any alteration is understood as an unexpected change in the system i.e. something exceptional which must be resolved in order to recover the natural state of equilibrium. Thus, systems display linear behaviour, in which any change is predictable and may be foreseen and minutely controlled.

However, in the light of the scientific advances which have taken place in the last decade with regard to the concept of sustainability, in the fields of ecology, thermodynamics, ecological economics, the so-called sustainability science and global change science, among others, it is today possible to propose a different approach to tourism systems, seeing them as “complex, adaptable, interdependent and non-linear systems” (Farrell and Twining-Ward, 2004: 69). In such systems there does not exist a single, simple equilibrium, but instead different situations of stability,



instability and, even, chaos. Moreover, it is possible for more than one of these states to exist simultaneously.

Chaos and complexity theory, developed from the 1970s onwards by a group of ecologists (Holling, 1973, 1978 and 1995) and subsequently employed in research into companies and organizations (Kelly and Allison, 1999; Wood, 2000), permits this new paradigm to be explained; its application to tourism guarantees improved adaptation to the multidisciplinary and complex environments in which it operates, adopting a holistic approach which is more useful and closer to reality.

In summary, according to this theory, tourist systems are “complex and uncontrollable, characterized by nonlinear, non-deterministic chaotic behaviour” (McKercher, 1999: 426). Consequently, their management must be flexible, adaptable and experimental, in a continuous process which constantly incorporates revisions and corrections.

The ecosystems of which the economic subsystem (which incorporates tourism) forms part, display cyclical behaviour, with different dynamic states in which periods of stability alternate with periods of chaos. These alterations continually modify the interactions between tourism activity and its environmental, cultural, social, economic, technological, legal and political surroundings, shaping a process of development which must respond to an adaptable tourism cycle.

This explains the appearance of models of adaptive management, based on the acceptance of uncertainty as the working environment and on the progressive accumulation, through a participatory process of social education, of the sufficient knowledge for the understanding of the changes which have been occurring and systematic reaction to such changes, both adapting to and benefiting from the new situation. Thus, the interested parties participate, together with the managers of the tourist destination, in a continuous and systematic process of the transfer and feedback of information, obtained as a result of the need to experience, test, adapt and take advantage of the changes occurring, producing a knowledge base which allows them to conveniently adjust their policies to the new situation.



As summarised by Farrell and Twining-Ward (2004: 79), the principles of adaptive management have been successfully applied to ecosystem management in North America (Nyberg, 1999; Lee, 1993), in British Columbia (Rollins, Trotter and Taylor, 1998) or, more directly related to tourism, in Samoa (Twining-Ward, 2002 and 2003) or in the Sydney Quarantine Station (Australia), as the World Tourism Organization (WTO) also notes (2004).

McKercher (1999) proposes a management, or decision-making, model based upon this theory i.e. each element of the system is connected to the rest, both directly and at more than one remove. Thus, the perturbation of one of the system elements will produce a change in the state not only of the tourist system, in general, but also in any of the other system components. This is a model which is open and in continuous movement, in which a change in any element will modify the state of tourism activity in the destination as a whole, obliging its managers to respond by reorienting management strategy.

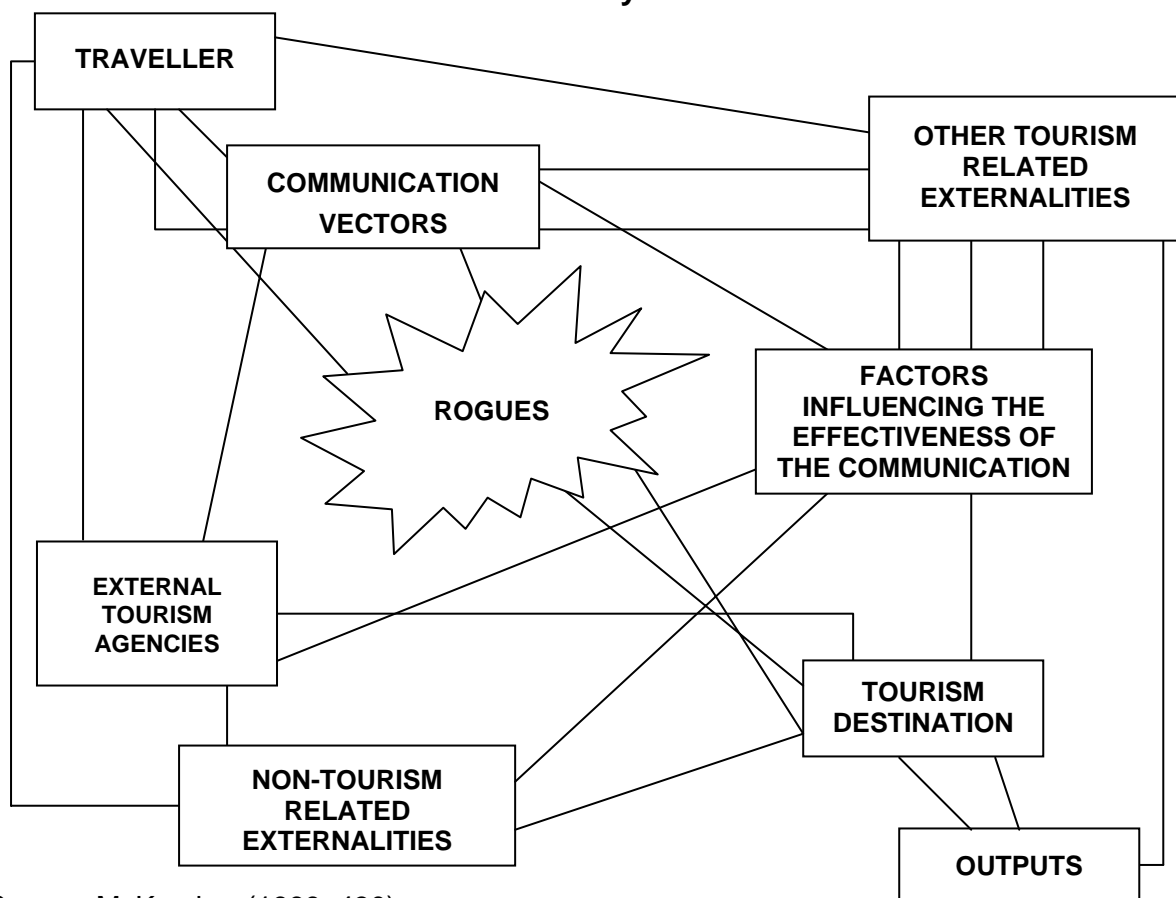
The model proposed by McKercher (see Diagram 3) explains tourism in terms of a set of complex relationships from which at least nine essential elements configure a tourism destination (McKercher, 1999: 429-430):

- The *traveller*, who is the fundamental element of the system.
- The *communications vectors* employed to connect the traveller to the destination.
- The *considerations* or factors which condition the effectiveness of that communication process.
- The tourism *destination*.
- The *external tourism agencies* (public and private sector), which attempt to influence tourism activity.
- *Other tourism-related externalities*, such as alternative tourism destinations, which affect the capacity of the destination to attract tourists (in short, their competitiveness).



- *Non-tourism-related externalities*, or macroenvironmental forces, such as political, economic and social changes, natural disasters, wars, etc., which affect willingness to travel.
- *Outputs from the system*, both desired and undesired.
- *Rogues or Chaos makers*. These are a set of agents which, by their decisions, push the system towards chaos.

**Diagram 3**  
**Model of tourism planning and management based on chaos and complexity theory**



Source: McKercher (1999: 430).

The management of a tourism destination, employing a model of the above characteristics, requires the establishment of both a static structure, which reflects each of the component parts of the tourism system, and a dynamic structure, which identifies each of the agents (both endogenous and exogenous) who take decisions which affect the tourism destination, while the relationships produced between them will be defined, attempting to synthesise them, in order to guarantee the efficient



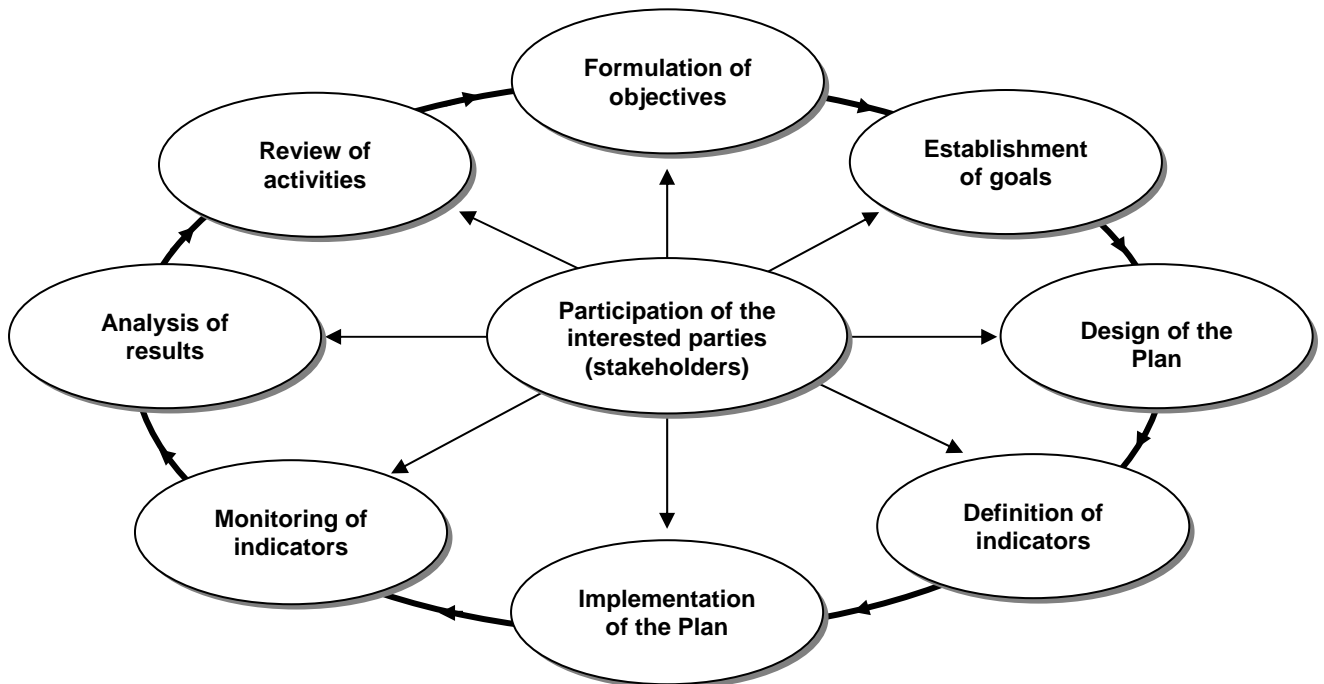
management of the system and its adaptation to a changing environment as a result of the continuous variations in the relationships which exist among the various agents.

### **III. A MODEL OF ADAPTIVE TOURISM PLANNING AND MANAGEMENT FOR THE ANDALUSIAN NATURAL PARKS**

On the basis of the approaches analysed above, we have defined a model of adaptable tourism planning and management for the Andalusian natural parks, as shown in Diagram 4. The model proposed is inspired, therefore, by the principles of chaos and complexity theory and, at the same time, represent an adaptation of the TOMM used by Twining-Ward in Samoa (Twining-Ward, 2002 and 2003; Twining-Ward and Butler, 2002; Farrell and Twining-Ward, 2004 and WTO, 2004). On the other hand, this is a model which adopts a circular approach that guarantees a continuous revision of the cycle. Additionally, and as the diagram demonstrates, the participation of the interested parties in each and every phase of the model's development encourages a learning process which produces a continual improvement in results, due to a greater capacity for adaptation.



**Diagram 4**  
**Model of active and adaptable tourism management for the Andalusian natural parks**



Source: Author's elaboration, adapted from Twining-Ward and Butler (2002).

The process begins with the formulation of objectives and the establishment of goals which characterize any process of tourism policy formulation. It should be remembered, as Eagles *et al.* (2002: 48) point out, that the objectives must reflect the fundamental purpose of the protected area and respond to the value assigned to each of the attributes of this space by the various groups interested in its tourism development. In addition, they must respect and interpret the norms which regulate its declaration as a protected area. Consequently, the objectives and goals must be “personalized” for each natural park; this will depend on their degree of tourism development, but also on the intensity of tourism which characterizes this development and on their specialization.

The processing of both groups of surveys has permitted the definition of a set of possible objectives which may serve as a guide for the formulation of tourism policy and also for the agents who participate in the design of the plan for each of these areas. These objectives have been classified in three large groups: process objectives, management objectives and product objectives. On this point, it should





be remembered that although the more numerous the groups of persons and interests participating in the process, the more difficult it is to reach agreement, the maximum consensus regarding objectives greatly facilitates the rest of the planning process. Once the objectives have been defined, they must be quantified, in order to convert them into attainable goals; this, once again, depends on the characteristics of each natural park.

The second stage is aimed at defining the contents of the Plan and constructing a set of indicators which guarantee the subsequent tracking and analysis of the results. A set of strategies was delimited for the definition of the content of the plan; these were obtained as a result of the survey process applied both to Protected Area Managers of the natural parks and the experts consulted in the Delphi analysis. However, here too the circumstances of each natural park may indicate a choice of strategies, or the proposal of others, different to those proposed.

Once the content has been defined and the system of indicators designed, the next step is the implementation of the Plan. To this end, as detailed below, a prior effort aimed at “fitting” it within the set of sector-based or general plans and programmes which affect the natural park. Equally, it is important to demarcate the competencies which the various public administrations will assume in the process and guarantee a new state of institutional coordination, which has so far been non-existent.

In addition, as we proposed when analysing the model constructed by McKercher, it is essential to identify each of the agents who intervene in the system i.e. the interested parties or stakeholders, and define the relationships among them. Finally, it is necessary to define the composition of the “body” which will be responsible for the tourism management of the natural park, in accordance with the Plan established, and the functions it may assume. In this case too we have at our disposal the information obtained in the survey process, as both the Protected Area Managers and the experts who participated in the Delphi analysis were expressly questioned regarding these potential functions.



The final stage consists of the review of activities, once the results have been analysed. To this end, the continuous tracking of the system of previously defined indicators is essential. Consequently, objectives and goals may be reformulated and the process may be reinitiated; as stated above, it is a cyclical one and is subject to continuous feedback.

### III.1. Design of the Tourism Management Plan

#### III.1.1. Contents of the Plan

As stated above, the circumstances which, from the tourism point of view, characterize the different natural parks are highly varied, and this requires the model proposed and the strategies to be implemented to be adapted to each of these areas. As a result of the survey process, four large groups of possible strategies to be implemented were defined:

- Process strategies.
- Management strategies.
- Product strategies.
- Transversal strategies.

Naturally, these strategies must be directly related to those which comprise the tourism policy for natural parks as a whole. However, they will be adapted to the specific circumstances of each natural park and the demands and requirements of the various interested parties, through a participatory process which guarantees the integration of all the driving forces of tourism activity in each territory.

#### III.1.2. Choice of indicators

The final objective of a system of indicators, from the point of view which concerns us here, is to contribute to the active and adaptive tourism management of the protected area, providing precise information regarding the degree of efficiency with which the actions contained in the management plan are executed and,



additionally, whether these actions fulfil the objectives for which they were designed.

In this regard, a distinction is normally made between a *tracking plan*, which provides information concerning the evolution of the ecosystems of the protected area, detecting the changes produced in the environment and/or the species which inhabit it, establishing the causes of such changes, deciding if these variations are within conservation limits and proposing a management model to modify the undesired tendencies, and the *management assessment*, the objective of which is to determine to what degree the proposed management objectives have been fulfilled (in both the tourism management plan and the tracking plan), thereby informing the managers of the effects of the activities performed and allowing them to rectify those which are not producing the expected results, or which are having negative repercussions on the conservation of the area under management.

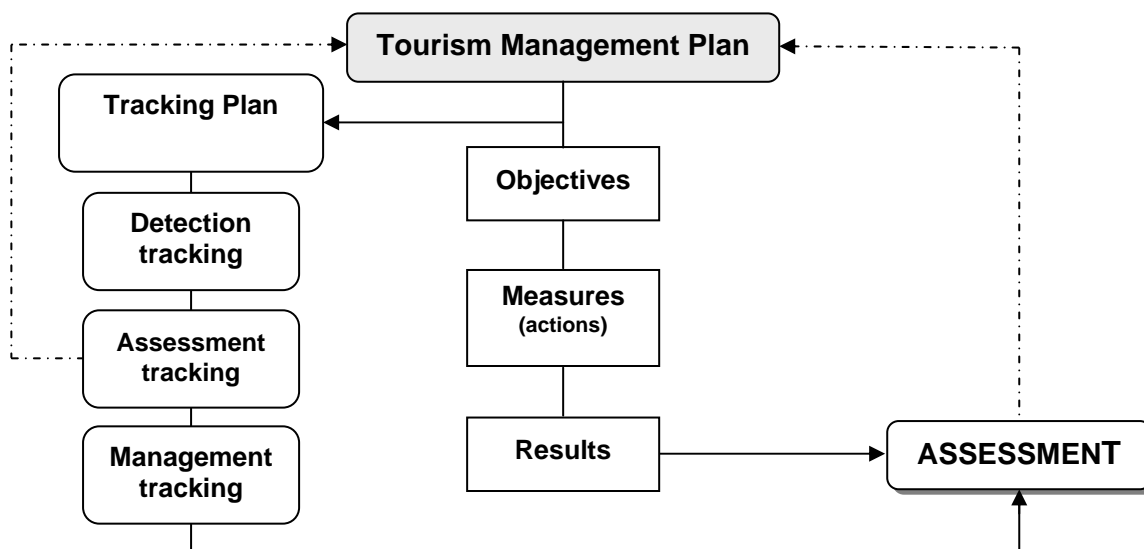
Consequently, a strategy of active and adaptive tourism management for the protected areas requires a system of indicators of greater scope than those linked exclusively to management and traditionally related to the administration of programmes and activities. It is therefore necessary that the system designed permits both functions (tracking and assessment) to be performed. For this to be possible, it must be taken into account that tracking plays a fundamental role in the gathering of information for its subsequent evaluation, and thus it is very important to define, from the very beginning, the data collection methods in each of the stages of the tracking plan. As Castell (2000: 31) states, there are three such stages:

1. Detection tracking, the principal objective of which is to list the variations which occur in the natural systems, analyse them and attempt to define possible changes or tendencies over time.
2. Assessment tracking, aimed at identifying the causes of a specific change which has been detected and proposing the appropriate measures to undertake, if it should be considered necessary, a management programme to counteract the changes which have been produced.



3. Management tracking, directed at the analysis of the effects of the application of specific management programmes.

**Diagram 5**  
**Circular flow chart for the tracking and assessment of adaptive tourism management for protected areas**



Source: Author's elaboration.

Finally, following the selection of the indicators which meet all the requirements we have analysed, then for each of them it is necessary to design a record sheet which gathers together data regarding the description of the indicator, the type of indicator, the calculation system, the data source, the protocol for the taking of measurements and the desired trend of the indicator.

Even supposing that it were an interesting challenge, it is not the purpose of this study to define a system of indicators applicable to the tourism management of the Andalusian natural parks which, moreover, could not have a universal application, insofar as such a system must be adapted to the specific territorial, environmental and social characteristics, as well as those of tourism development, for each area in which it was intended to be applied.



Wide experience exists of applying indicators to the management of tourism destinations and, although to a lesser degree, of protected areas. The WTO itself, conscious of the importance of the use of indicators in the management of tourism destinations, has recently undertaken a study (OMT, 2004) in which, in addition to compiling a considerable number of worldwide experiences, establishes a set of approaches to be considered when defining a system of indicators. The extremely comprehensive (over 200 pages) third chapter of this publication is dedicated to the description of a large number of indicators which may be used to respond to similar situations which usually occur in the majority of destinations. Chapter IV of the same book analyses the application of indicators in different types of destinations, among which are ecotourism destinations (WTO, 2004: 268-269) and protected parks and areas (WTO, 2004: 269-272).

However, as the WTO (2004) recognises, it will be the process of tourism planning for each protected area which determines the model of tourism management to be followed, establishing the general guidelines and the principal actions to be taken to achieve the intended objectives. The system of indicators must respond to the management model chosen and to the information required, in order to evaluate both the changes produced in the ecosystem by tourism activity and the results produced by the act of management itself.

### III.2. Implementation of the Tourism Management Plan

#### III.2.1. The "fitting" of the Tourism Management Plan

The implementation phase requires a prior process of "fitting" to guarantee that the various policies and lines of activity to be undertaken mutually reinforce the planning instruments which already exist at a higher level; this will permit gradual and ordered progress towards the achievement of the proposed objectives. The intention, therefore, is to integrate the tourism planning for each natural park at the various levels of general and sector-based planning which affect it, creating synergies in the development of each of them and optimising the efforts of the different agents who intervene.



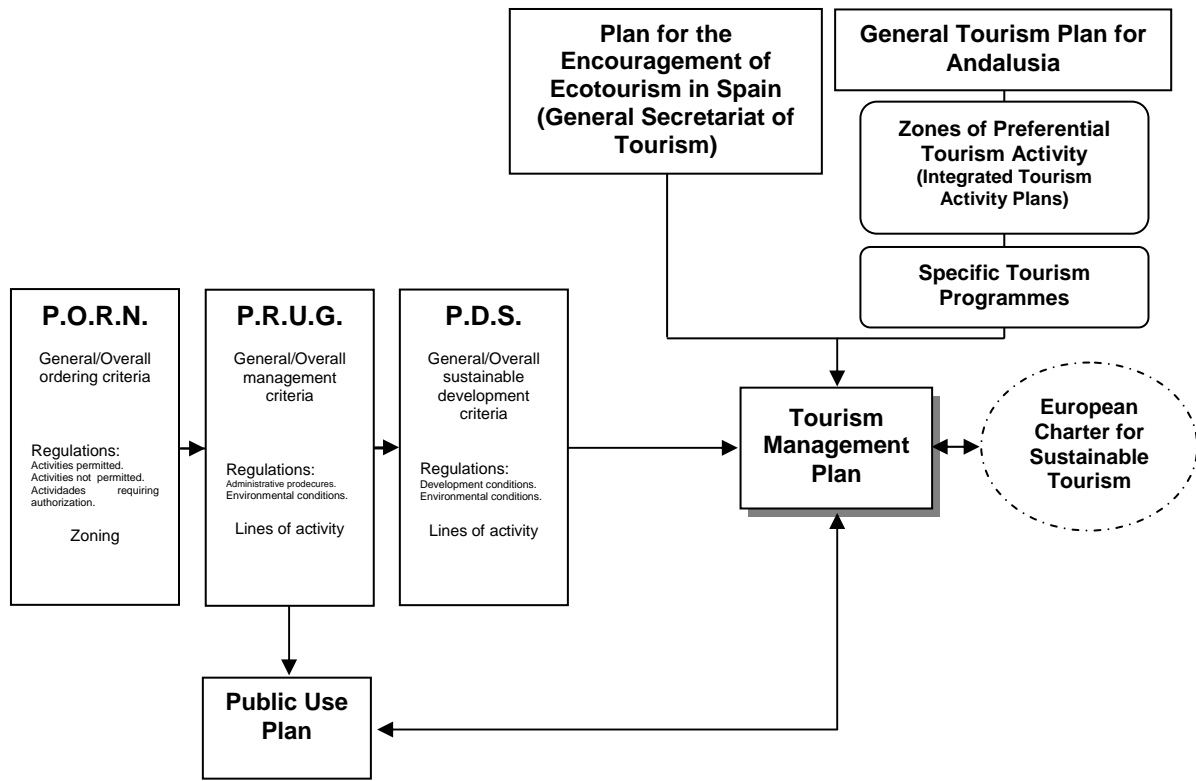
As Diagram 6 shows, two areas of "fitting" must be taken into account; these correspond, on the one hand, to the planning which is the responsibility of the environmental administration and, on the other, to the planning undertaken by the tourism administration. With regard to the first area the basic planning instruments which affect each of the Andalusian natural parks are the Plan for the Ordering of Natural Resources (PORN), the Governing Plan for Use and Management (PRUG) and the Plan for Sustainable Development (PDS). The PORN is responsible for diagnosing and forecasting the evolution of the natural resources, ecosystems and landscapes of the natural park, establishing its general system of uses and limitations and formulating guidelines for the development and administration of sectoral policies. The PRUG, in turn, regulates the activities which may be undertaken in the natural park, reconciling the development objectives with those of the conservation, protection and improvement of environmental values. The PDS is intended to stimulate the socioeconomic structures of the area of influence of the natural park, safeguarding environmental ecological stability, in accordance with the provisions of the PRUG.

Thus, both the PORN and the PRUG prevail over the PDS and, although the legislation does not recognise any hierarchical supremacy of the PORN over the PRUG, the PORN enjoys a position of regulatory superiority over the other instruments.

Law 2/1989 regarding the Inventory of Protected Areas in Andalusia recognises a fourth planning instrument, namely the Development Programmes (PFs), aimed at updating, prioritising and individualising the lines of activity established in the PDS. Consequently, it seems logical that the Tourism Management Programme of the natural park be established under the figure of the Development Programme, inserted in the Plan for Sustainable Development of the natural park.



**Diagram 6**  
**Hierarchy of planning for the adaptive tourism management of the Andalusian natural parks**



Source: Author's elaboration.

The existence of the Public Use Plan (PUP) should also be taken into account. The PUP is a sectoral plan of the PRUG, which establishes a model of the public use thought to be appropriate for each natural park, and in addition the guidelines for the actions contained in each of the programmes which define the activities to be undertaken and their corresponding zoning. Many of these activities are directly related to the various forms of tourism which take place within the natural park, and thus it is obvious that there must exist a close working relationship between the Tourism Management Plan and the PUP.

With regard to the scope of the tourism administration, Article 15 of the Law of Tourism (Law 12/1999, of 5 December, amended by Law 18/2003, of 29 December), established that the General Tourism Plan, following consultation with the Andalusian Tourism Council, may establish Zones of Preferential Tourism Action, Destination Reclassification Programmes and Specific Tourism Programmes.



The declaration of Zones of Preferential Tourism Action will lead to the elaboration of an Integrated Tourism Action Plan, which will be formalized via an agreement to be signed between the Regional Ministry responsible for tourism, interested local bodies and, where appropriate, other public administrations, organizations or organisms. The Law itself establishes the minimum contents which an Integrated Tourism Action Plan should have.

In turn, Article 18 of the same Law regulates the Specific Tourism Programmes, and establishes that, following consultation with the administrations and sectors affected, the Regional Ministry responsible for tourism may elaborate and approve plans aimed at the development, maintenance and improved use of specific sectors. The territorial scope of these programmes may be regional or subregional.

It would seem clear that this is the ideal framework within which to propose the implementation of tourism policy for the Andalusian natural parks. This tourism policy should take concrete form via a specific programme for ecotourism (Article 18 of the Law of Tourism), which would contain a series of measures aimed at the fulfilment of the objectives of tourism policy established for the range of natural parks in Andalusia. As the conditions established in Article 16 of the Law of Tourism become fulfilled and as required by the level of tourism development, such areas will progressively be declared to be Zones of Preferential Tourism Action and will elaborate their corresponding Integrated Tourism Action Plans, which are in reality the Tourism Management Plans described in the proposed model.

In addition, the Plan for the Encouragement of Ecotourism in Spain, designed by the General Secretariat of Tourism (Ministry of Industry, Tourism and Trade), which proposes concrete actions and guidelines to encourage this type of tourism in Spain, must be taken into account. This Plan focuses, basically, on the application of a set of instruments intended to "create product in specific, highly organized destinations in order to optimise the positive repercussions of ecotourism" (General Secretariat of Tourism, 2004: 4). Rather than as an investment plan, it was designed as "a tool for cooperation among the various administrations having competencies





regarding the planning, design and creation of product, promotion, commercialization, tracking and quality of ecotourism” (General Secretariat of Tourism, 2004: 67). In any case, the process of tourism planning and management cannot be undertaken in isolation from this Encouragement Plan, and thus its orientations must be considered. In addition, it is foreseeable that the application of this Plan will produce, on the one hand, an improvement in the programming instruments applied to ecotourism in Spain and on the other (and above all), in an improvement of the competitive capacity of this type of tourism, from which, by definition, our Autonomous Community will benefit.

In summary, all the Andalusian natural parks will, within a reasonable period of time, have implemented the new model of adaptive tourism planning and management. Once the model has been implemented, it will be the subject of feedback, using the mechanisms it itself contains, and thus the only guarantees required are: i) participation of all the agents who have expressed interest in the tourism planning and management of the natural park; ii) sufficient freedom for those responsible for its management, so that this responds to the real needs expressed by the interested parties; iii) adequate financing to guarantee its functioning.

To conclude, we must refer to the “fit” with the European Charter for Sustainable Tourism, which has already recognised five natural parks in Andalusia. Probably, this is one of the simplest, and also the most interesting, relationships for the natural park. The Charter, in the final analysis, implies the commitment of these areas to put into practice a local strategy which favours sustainable tourism. This commitment takes concrete shape by the definition of a pluriannual strategy of sustainable tourism development, which must incorporate a programme of contractual actions by and for the territory and the signatory companies. In reality, that strategy is the Tourism Management Plan we are proposing, which becomes a perfect tool to contribute to the meeting of the commitments contained in the European Charter for Sustainable Tourism. Thus, in the parks which have been recognised by the Charter, the contents of the Tourism Management Plan must incorporate its commitments, and in those not yet recognised the Plan will serve as a magnificent example of the commitments accepted by the agents involved in the



territory and, therefore, will make a positive contribution to the certification of their membership.

### III.2.2. Distribution of responsibilities within the Tourism Management Plan (institutional coordination)

One of the principal shortcomings of the tourism management of the Andalusian is the lack of dialogue between the environmental administration and the tourism administration; this was referred to in the answers provided by both the experts consulted in the Delphi analysis and the Protected Area Managers of the natural parks.

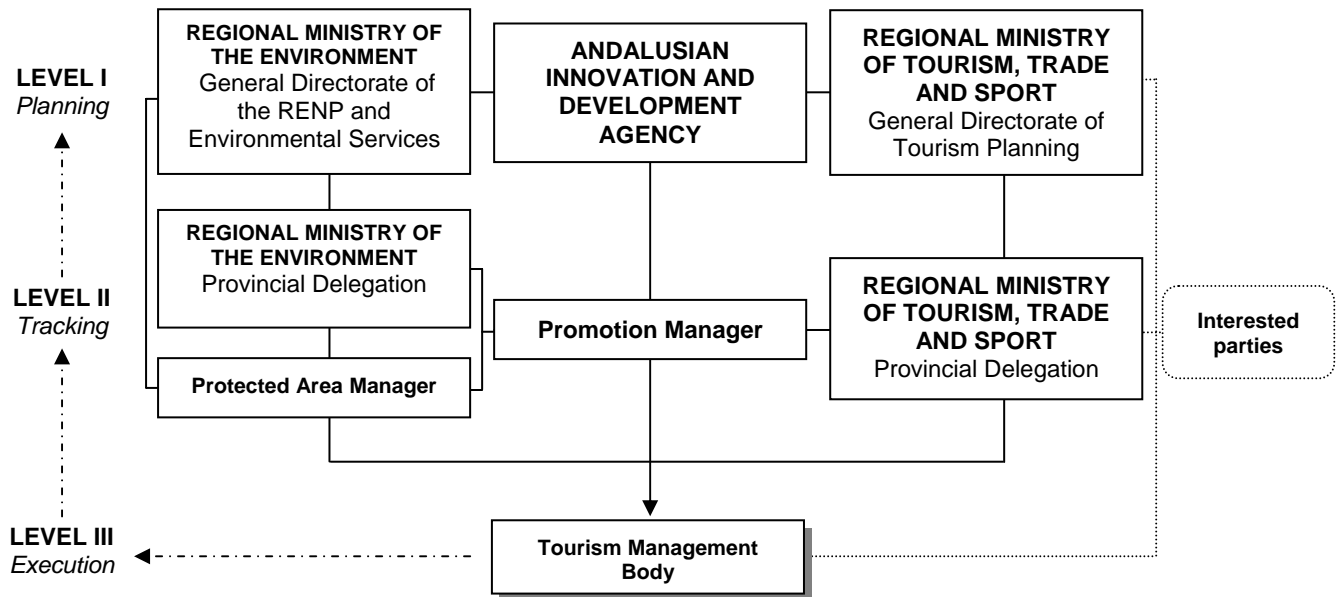
Diagram 7 depicts an organisational flow chart of the distribution of competencies which seemed most logical to us in order to guarantee the implementation of the model between the two administrations, to which is also incorporated the Andalusian Innovation and Development Agency; the promotion managers of the natural parks, who currently manage the Plans for Sustainable Development, are accountable to this body. The flow chart accommodates a three-tier level of intervention and, as in the model as a whole, incorporates a circular flow of continuous exchange of information and opinions with the other interested parties.

The first level of intervention is the planning of the tourism development process for each area. Taking into account the strategy lines defined by tourism policy for the natural parks as a whole, the objective today is to design a Tourism Management Plan for each of them. In order to do this, as shown in Diagram 4, it is necessary to formulate objectives, set goals, define the contents of the Plan and select the indicators to be used for the tracking and evaluation of the process. In our understanding, this process should involve the two General Directorates which have competencies in Regional Ministries i.e. the General Directorate of the RENP (*Red de Espacios Naturales Protegidos* - Protected Areas Network) and Environmental Services (Regional Ministry of the Environment) and the General Directorate of Tourism Planning (Regional Ministry of Tourism, Trade and Sport), together with the Andalusian Innovation and Development Agency. The tourism management body



will be directly involved from the very beginning and, naturally, it will be necessary to guarantee the extensive participation of all interested parties, to allow the Plan to respond to the interests and needs of a large majority of the agents involved.

**Diagram 7**  
**Flow chart of the distribution of competencies in the adaptive tourism management of the Andalusian natural parks**



Source: Author's elaboration.

The second level is responsible for tracking the execution of the Plan. This corresponds to the provincial tier of the various public administrations involved i.e. to the Provincial Delegations of each Regional Ministry and, on the part of the Andalusian Agency for Innovation and Development, to the promotion manager, responsible for the management of the PDSs being implemented in the natural parks of each province. This level also includes the Protected Area Manager of the natural park in question; he or she also participates in the planning process, advising the General Directorate since, as stated in previous sections, it is to this figure that the environmental administration has awarded the greatest decision-making power in the management of such areas. Naturally, the managing body itself and the other interested parties also participate in the task of tracking.

The third level of intervention is that which concerns the execution of the Plan, a function which is the responsibility of the tourism management body created for



that purpose, although it also requires the active participation of the interested parties as a whole.

### III.2.3. Identification of interested parties and demarcation of activities

One of the key elements in constructing a model of the type we propose is the identification of the interested parties, or stakeholders, and, above all, defining or demarcating the relationships among them, since a change in the conditions in which these take place, however slight, will affect, to a greater or lesser degree, the structure of the model, which must rapidly be adapted to the new circumstances in order to keep intact its possibilities of achieving the objectives proposed. This constant adaptation requires, therefore, the rapid availability of accurate information regarding these agents and their interrelationships. Furthermore, another of the characteristics of this model is the active participation of all the interested agents, which means their identification is even more important, since they must be addressed in order to facilitate and ensure their intervention in the formulation and subsequent implementation of the Tourism Management Plan.

In the questionnaire for the Protected Area Managers we included several questions which had precisely this objective. In addition, the European Charter for Sustainable Tourism in protected areas (EUROPARC FEDERATION, 1999) distinguishes between different interest groups when establishing the commitments for each of them, while in even the scientific literature, authors such as Eagles *et al.* (2002: 47-55) or Viñals *et al.* (2002: 11-15) have been concerned to identify these agents and understand the relationships among them.

In our concrete case, we have identified the principal interested parties and attempted, moreover, to understand the generic interests and typical actions which influence their actions in the tourism development of the Andalusian natural parks (see Table 3). It must be emphasised, however, that this is not an exhaustive analysis, but instead is simply intended to produce a general approach which may be adapted to the circumstances of each natural park. An adequate process of identification of all the interested parties requires the characterisation of each of the



groups. In order to do this, it is recommended to compile an inventory which determines, at least, for each group of actors, the following elements (Viñals *et al.*, 2002: 15):

- The function they fulfil.
- Representativeness.
- The power awarded to them.
- The resources at their disposal.
- Their intended objectives.
- The actions they perform.
- The results they obtain.
- The relationships established with other actors to implement their strategies.

The relationships between the various actors involved depend upon the circumstances surrounding each natural park, the management objectives proposed, etc., and thus they must be analysed individually during the planning process for each area.



**Table 3**

**Principal agents interested in the tourism development of the Andalusian natural parks. Generic interests and activities**

Interested parties	Generic interests	Activities
<p><b>Regional Ministry of the Environment</b></p>	<ul style="list-style-type: none"> <li>- To preserve the resources and values of the natural parks.</li> <li>- To contribute to the knowledge, use and enjoyment of their natural, cultural and social values.</li> <li>- To contribute to the socioeconomic development of the municipalities in the zone of influence of these areas.</li> <li>- To guarantee the correct management of the equipment available for public use, in order to satisfy the requirements of visitors.</li> <li>- To implement the principles of sustainability, encouraging the transition to new forms of production and more responsible consumption.</li> <li>- To stimulate research into the values, resources and potentialities of the natural parks.</li> <li>- To encourage the participation of other interested parties in the management of these areas.</li> </ul>	<ul style="list-style-type: none"> <li>- Regulation of the different uses of the area, ensuring their compatibility and their sustainable exploitation.</li> <li>- Development of awareness/information campaigns for both visitors and residents.</li> <li>- Control of activities in the interior of the natural parks.</li> <li>- Planning and management of the natural parks.</li> <li>- Surveillance and control of compliance with environmental regulations.</li> <li>- Development of environmental education programmes.</li> <li>- Maintenance and management of the facilities offered for public use.</li> <li>- Development of research programmes regarding the impact of tourism activity.</li> <li>- Response to the requirements of tourism/recreational use of the Andalusian natural parks.</li> <li>- Development of programmes for the communication of the values, resources and potentialities of the Andalusian natural parks.</li> </ul>
<p><b>Regional Ministry of Tourism, Trade and Sport</b></p>	<ul style="list-style-type: none"> <li>- To respond adequately to the increasing demand for ecotourism in Andalusia.</li> <li>- To improve the competitive position of the Andalusian natural parks and, consequently, that of Andalusia as a tourism destination.</li> <li>- To increase the revenue obtained from tourism.</li> <li>- To contribute to the preservation of the resources and values of the natural parks</li> <li>- To ensure the appropriate tourism management of the Andalusian natural parks, in order to guarantee the complete satisfaction of the tourists who visit them.</li> <li>- To implement the principles of sustainability, encouraging the transition to new forms of production and more responsible consumption.</li> <li>- To encourage the participation of other interested parties in the management of these areas.</li> </ul>	<ul style="list-style-type: none"> <li>- Analysis of the competitive environment of the Andalusian natural parks and strategic responses.</li> <li>- Exploration of new necessities and profiles of the natures-based tourism demand. Identification of new markets.</li> <li>- Surveillance and control of compliance with tourism regulations.</li> <li>- Tourism planning and management of destinations (Andalusian natural parks).</li> <li>- Control of tourism resources and tourism opportunities, in general.</li> <li>- Tourism information.</li> <li>- Development of promotional campaigns for tourism opportunities in the natural parks.</li> <li>- Channelling of financing for the creation and improvement of tourism opportunities in these areas.</li> </ul>

Source: Author's elaboration.



Interested parties	Generic interests	Activities
<b>Town and city councils</b>	<ul style="list-style-type: none"> <li>- To guarantee additional revenue for municipal treasuries.</li> <li>- To exploit tourism as an instrument for the generation of employment and revenue for the local population.</li> <li>- To contribute to the preservation and resources of the natural park.</li> <li>- To improve the competitive position of the municipality within the natural park.</li> <li>- To recover the heritage and the traditions of the municipality.</li> <li>- To strengthen the self-esteem of the local community.</li> <li>- To improve tourism information services.</li> <li>- To increase the awareness of visitors and residents.</li> <li>- To improve the public services available in these areas.</li> <li>- To control the urban sprawl that usually accompanies processes of tourism development.</li> <li>- To contribute to the planning and management of sustainable tourism in the Andalusian natural parks.</li> </ul>	<ul style="list-style-type: none"> <li>- Control of land and town planning.</li> <li>- Concession of municipal licences for the installation of tourism establishments.</li> <li>- Provision of public services, such as cleaning, rubbish collection, water supply, etc.</li> <li>- Control of compliance with regulations regarding noise, sewage, etc.</li> <li>- Development of awareness campaigns for both visitors and residents.</li> <li>- Recovery of heritage and local culture.</li> <li>- Tourism information.</li> <li>- Promotion of and publicity for the municipality and its potential for tourism development.</li> </ul>
<b>Provincial delegations</b>	<ul style="list-style-type: none"> <li>- To make tourism an instrument for local development.</li> <li>- To contribute to the preservation of the resources and values of the natural park.</li> <li>- To improve the competitive position of the province within Andalusia.</li> <li>- To recover the heritage and the traditions of the province.</li> <li>- To increase the awareness of visitors and residents.</li> <li>- To improve tourism information services.</li> <li>- To improve the public services available in these areas.</li> <li>- To contribute to the planning and management of sustainable tourism in the Andalusian natural parks.</li> </ul>	<ul style="list-style-type: none"> <li>- Development of awareness campaigns for both visitors and residents.</li> <li>- Recovery of heritage and local culture.</li> <li>- Tourism information.</li> <li>- Promotion of and publicity for the natural park and its potential for tourism development.</li> <li>- Advice regarding the implantation and development of new initiatives and entrepreneurial activities.</li> <li>- Channelling of financing (EU programmes) to stimulate development.</li> </ul>
<b>Tourism entrepreneurs</b>	<ul style="list-style-type: none"> <li>- To exploit the resources of the natural park and make their productive investments more profitable.</li> <li>- To respond to the expectations of the demand for tourism-recreational use of that area.</li> <li>- To improve its competitive position with regard to other opportunities offered within the natural park.</li> </ul>	<ul style="list-style-type: none"> <li>- Investment for the exploitation of the resources and potentialities of the natural park.</li> <li>- Analysis of its competitive environment.</li> <li>- Exploration of new necessities and profiles of the nature-based tourism demand. Identification of new markets.</li> <li>- Response to the expectations of tourism demand.</li> <li>- Promotion of the tourism opportunities offered.</li> </ul>

Source: Author's elaboration.



Interested parties	Generic interests	Activities
<p><b>Concessionaries of equipment for public use</b></p>	<ul style="list-style-type: none"> <li>- To make their concessions profitable.</li> <li>- To respond to the expectations of the demand for tourism-recreational use of that area.</li> <li>- To identify new markets.</li> <li>- To add new services to the set of existing opportunities within the natural park to guarantee their profitability.</li> <li>- To exploit the resources of the natural park.</li> <li>- To participate in the management strategy established by the competent authority.</li> <li>- To contribute to the heightening of the awareness of its users.</li> <li>- To contribute to the dissemination of the natural, cultural and social values of the natural park.</li> </ul>	<ul style="list-style-type: none"> <li>- Response to the principal requirements of nature-based tourism demand</li> <li>- Supply of traditional products of the natural park and souvenirs.</li> <li>- Development of environmental education programmes.</li> <li>- Development of awareness campaigns for both visitors and residents.</li> <li>- Promotion of the tourism opportunities offered by the natural park.</li> <li>- Tourism information.</li> </ul>
<p><b>Rural development groups</b></p>	<ul style="list-style-type: none"> <li>- To make tourism an instrument for rural development, exploiting its capacity to create employment and promote entrepreneurial initiatives and culture.</li> <li>- To value natural and cultural heritage.</li> <li>- To improve the organizational capacity of local communities.</li> <li>- To contribute to the dissemination of the natural, cultural and social values of the natural park.</li> <li>- To contribute to the planning and management of sustainable tourism in the Andalusian natural parks</li> </ul>	<ul style="list-style-type: none"> <li>- Strategic planning of development.</li> <li>- Socioeconomic stimulation and improvement of the organizational capacity of local communities.</li> <li>- Encouragement of and support for cooperation among local communities.</li> <li>- Protection and improvement of the natural and cultural heritage.</li> <li>- Appreciation of local products from the rural environment.</li> <li>- Employment of new skills and technologies.</li> <li>- Advice regarding the implantation and development of new entrepreneurial initiatives and activities.</li> <li>- Channelling of financing (E.U. programmes) to stimulate development.</li> </ul>
<p><b>Tour operators</b></p>	<ul style="list-style-type: none"> <li>- To obtain profits from their operations.</li> <li>- To respond to the demands of the market.</li> <li>- To look for new business opportunities.</li> <li>- To exploit the resources and potentialities of the tourist destinations in which they operate.</li> <li>- To maximise the experience of tourists in order to gain customer loyalty, to the operator rather than the destination.</li> </ul>	<ul style="list-style-type: none"> <li>- Organization and structuring of the tourism opportunities offered by the natural park, ensuring the involvement of all service suppliers.</li> <li>- Identification and development of target markets.</li> <li>- Analysis of the requirements, expectations and values of real and potential tourism demand in the natural parks.</li> <li>- Response to the expectations of tourist demand.</li> <li>- Promotion of the tourist destination.</li> </ul>

Source: Author's elaboration.





Interested parties	Generic interests	Activities
<b>Visitors/tourists</b>	<ul style="list-style-type: none"> <li>- To improve personal experiences.</li> <li>- To reinforce environmental, cultural or social values.</li> <li>- To contribute to the preservation of the resources and values of the natural parks.</li> <li>- To strengthen family ties or create group spirit.</li> <li>- To improve health and/or physical condition.</li> <li>- To encounter or experience something new, to learn.</li> <li>- To be with other people, share feelings and emotions, share experiences.</li> <li>- To undergo self-improvement and self-awareness.</li> <li>- To enjoy leisure time.</li> <li>- To experience the feeling of adventure.</li> </ul>	<ul style="list-style-type: none"> <li>- Following guided and self-guided routes in order to experience the principal attractions of the natural park.</li> <li>- Sports and physical fitness.</li> <li>- Purchase of traditional products of the natural parks and souvenirs.</li> <li>- Visits to nature centres, farm schools, etc.</li> <li>- Participation in the cultural and/or social activities of local communities.</li> <li>- Active participation in tasks of conservation of the resources and values of the natural park.</li> </ul>
<b>Resident population</b>	<ul style="list-style-type: none"> <li>- To exploit the opportunities offered by tourism for the creation of local businesses.</li> <li>- To gain access to improved services and infrastructure.</li> <li>- To improve their quality of life.</li> <li>- To reduce or eliminate the risks and negative impacts inherent in the process of tourism development.</li> <li>- To recover local traditions and heritage.</li> <li>- To contribute to the preservation of the resources and values of the natural park.</li> </ul>	<ul style="list-style-type: none"> <li>- Creation of local businesses in response to tourism demand.</li> <li>- Cultural exchange with visitors.</li> <li>- Implementation of activities for the recovery of cultural heritage and traditions.</li> <li>- Positive social changes, in terms of increased tolerance and wellbeing.</li> <li>- Struggle against the dissemination and maintenance of stereotyped perceptions of the local community.</li> </ul>
<b>Ecological groups</b>	<ul style="list-style-type: none"> <li>- To ensure the preservation of the resources and values of the natural park.</li> <li>- To implement the principles of sustainability, encouraging the transition to new forms of production and more responsible consumption.</li> <li>- To heighten the awareness of visitors and residents.</li> <li>- To contribute to the dissemination of the natural, cultural and social values of the natural parks.</li> </ul>	<ul style="list-style-type: none"> <li>- Denouncement of irregular practices in the relationships of other agents involved with the environment.</li> <li>- Development of programmes of environmental education.</li> <li>- Development of awareness campaigns for both visitors and residents.</li> <li>- Insistence on the improvement of management policies for the natural parks.</li> <li>- Active participation in tasks of conservation of the resources and values of the natural park.</li> </ul>

Source: Author's compilation.



Interested parties	Generic interests	Activities
<b>Non-tourism entrepreneurs</b>	<ul style="list-style-type: none"> <li>- To exploit the effects of tourism as a driving force for entrepreneurial activity.</li> <li>- To minimize the negative effects of tourism upon their productive activity (use of resources, appropriation of land, etc.).</li> <li>- To guarantee respect for their interests and rights of use.</li> </ul>	<ul style="list-style-type: none"> <li>- Provision of traditional products from the natural park and souvenirs.</li> <li>- Struggle against the distortions produced in the local economy as a result of tourism activity.</li> <li>- Exploitation of the multiplier effect of tourism activity.</li> <li>- Exploitation of the development opportunities which may be produced by the creation of infrastructure required by tourism.</li> </ul>
<b>Universities and other educational and research centres</b>	<ul style="list-style-type: none"> <li>- To improve the knowledge of aspects which are essential for the management of these areas.</li> <li>- To contribute to the dissemination of the values and potentialities of the natural parks.</li> <li>- To develop management tools for sustainable tourism</li> <li>- To implement principles of sustainability.</li> </ul>	<ul style="list-style-type: none"> <li>- Development of programmes of environmental education.</li> <li>- Development of research programmes regarding the impact of tourism activity.</li> <li>- Research into various aspects of the management of the natural park and the impacts of tourism activity.</li> </ul>
<b>International institutions and organisms which have awarded an emblem to the natural park</b>	<ul style="list-style-type: none"> <li>- To guarantee the fulfilment of the commitments resulting from the awarding of the emblem.</li> <li>- To implement the principles of sustainability, encouraging the transition to new forms of production and more responsible consumption.</li> <li>- To encourage networking to promote the conservation of the natural and cultural heritage of these areas and guarantee their sustainable exploitation.</li> </ul>	<ul style="list-style-type: none"> <li>- Dissemination of experience of good practices in the tourism management of areas linked to these networks.</li> <li>- Development of tourism promotion campaigns for these areas, linked to environmental education messages.</li> <li>- Promotion of the use of techniques and tools for sustainable tourism management.</li> <li>- Development of awareness campaigns for both visitors and residents.</li> <li>- Development of programmes of environmental education.</li> </ul>
<b>Competing tourism destinations</b>	<ul style="list-style-type: none"> <li>- To evaluate the factors which determine its competitive position.</li> <li>- To understand the communication and distribution channels employed by the natural park.</li> </ul>	<ul style="list-style-type: none"> <li>- Evaluation of the degree of satisfaction of visitors to the natural park.</li> <li>- Identification of the principal advantages and disadvantages of the natural park as a competitive tourist destination.</li> <li>- Analysis of promotion and commercialization strategies for the natural park.</li> </ul>

Source: Author's elaboration.



#### III.2.4. Composition and functions of the tourism management body

Almost three-quarters of the Protected Area Managers of the Andalusian natural parks agree that it is necessary to incorporate a specialist in tourism into their management. Although at the time of undertaking the questionnaire we were thinking of an individual figure of "tourism manager", as time passed this initial conception was transformed to that of a multidisciplinary team capable of responding to the challenges posed to the tourism management of these areas from various sources. This was also indicated by the results of the Delphi analysis, in which, in more than one statement, the experts suggested the need to incorporate such a team to the management of the Andalusian natural parks.

However, we are aware that although this would be the ideal situation, the cost this would entail is currently prohibitive, given the revenue structure these areas have. Consequently, we propose a mixed formula which, to a certain degree, has already been employed for the formulation of the PDSs, and which we believe satisfies both requirements; it is the incorporation of a tourism manager, who would assume the purely executive functions deriving from the implementation of the Plan, in accordance with the flow chart depicted in Diagram 7, and would receive technical assistance from a multidisciplinary team of specialists from the local university circles of each natural park. This team would exercise its functions, as a consultative body, at both the execution and tracking level.

The fundamental task of the tourism manager would be that of executing the Tourism Management Plan formulated by the competent authorities and the interested parties as a whole. However, the assumption of this project inevitably requires the exercise of a set of functions which were clearly defined when analysing the results of the questionnaire given to both the Protected Area Managers and the experts consulted in the Delphi study. These functions have been listed in six groups, as shown in Table 4.



**Table 4**  
**Functions of the tourism manager in the Andalusian natural parks**

<b>Functions</b>	<b>Description</b>	<b>Type of actions</b>
<b>Organization of tourism opportunities and promotion</b>	He/she must generate the necessary conditions to facilitate the integration of the tourism opportunities offered by the natural park and to improve the response to the requirements and expectations of tourists. Equally, he/she will evaluate and encourage new recreational possibilities and design the communication and promotional activities for the natural park, in accordance with the strategies established in the Tourism Management Plan.	<ul style="list-style-type: none"> <li>- To control and direct recreational activities within the natural park.</li> <li>- To design communication and promotional activities.</li> <li>- Visitor attention: authorizations, organization of tourist flows, etc.</li> <li>- Surveillance and control of installations.</li> <li>- To maintain fluid relationships with the business sector.</li> </ul>
<b>Guaranteeing sustainability</b>	He/she will guarantee that tourism activities and practices respect the principles of sustainability, guiding the agents involved towards the sustainable use of resources, making visitors aware of the need for responsible behaviour and improving the tracking of the repercussions of tourism in order to guarantee an adequate response.	<ul style="list-style-type: none"> <li>- To stimulate changes in the forms of production and tourism consumption towards responsible tourism.</li> <li>- To promote the use of sustainable tourism management tools: codes of conduct, audits, environmental management systems, 21 agendas, etc.</li> <li>- Tracking of indicators and rapid response.</li> </ul>
<b>Coordination between the various agents</b>	He/she will coordinate the actions, policies and agents involved in the tourism management and development of the natural park, in order to avoid conflicts of competence, and clearly define objectives and instruments in favour of an overall strategy.	<ul style="list-style-type: none"> <li>- To involve the local population in the entire process of planning and management.</li> <li>- Intermediation between local agents and administrations.</li> <li>- Liaison between the environmental and tourism administrations.</li> <li>- Intermediation between local businesses and foreign tour operators.</li> </ul>
<b>Education and information</b>	He/she will be the principal source of liaison for the agents involved, supported by a continuous process of feedback which will allow him/her to gather the greatest possible quantity of information they transmit and, at the same time, channel towards them a set of messages regarding the values of the natural park, management objectives and the attitude expected from each of them in order to contribute to such objectives.	<ul style="list-style-type: none"> <li>- To promote good environmental practices for visitors and residents.</li> <li>- To design and implement environmental education programmes.</li> <li>- To promote awareness among visitors and residents.</li> <li>- To maintain fluid channels of communication with visitors.</li> <li>- To guarantee a rapid and effective response to the demands of visitors.</li> </ul>
<b>Planning and management</b>	He/she will assume responsibility for the execution of the Tourism Management Plan, and will be also be the chief protagonist in its formulation. The tourism management of the park is therefore his/her responsibility, to be achieved by implanting the model and following the guidelines established by the tourism policy.	<ul style="list-style-type: none"> <li>- Responsibility for the execution of the Tourism Management Plan.</li> <li>- Active management of tourist flows, avoiding excessive load capacities and guaranteeing a quality experience for visitors.</li> <li>- Advice regarding tourism infrastructure.</li> <li>- Coordination of tourism use with the Public Use Plan.</li> <li>- Capture of resources and new forms of financing.</li> </ul>
<b>Socioeconomic and entrepreneurial stimulation</b>	He/she will advise, inform and support the agents who participate in socioeconomic and entrepreneurial initiatives, encouraging their implantation. In addition, he/she will act as a dynamising agent, promoting the implementation of initiatives and activities which favour the sustainable exploitation of the resources and opportunities offered by the market.	<ul style="list-style-type: none"> <li>- Information to entrepreneurs regarding financial aid and subsidies.</li> <li>- Advice regarding markets, demand characteristics, market niches, business opportunities, etc.</li> <li>- Stimulation of the development of new initiatives or activities.</li> <li>- Analysis of the socioeconomic repercussions of tourism development.</li> </ul>

Source: Author's elaboration.



In 2001, within the framework of the *Leonardo da Vinci* project of the European Union, the Regional Ministry of Employment and Technological Development elaborated the F.I.R.E. project (*Formación Innovadora en Red de Empresas-Business Network Innovative Training*); in its initial stage the professional profile and training curriculum of the "tourism manager of environmental resources" was elaborated (Consejería de Empleo y Desarrollo Tecnológico, 2001). The study, which was performed using survey techniques in the workplace and panels of experts in four European Union countries (England, France, Greece and Spain), permitted the competencies established for the professional profile of this manager to be organised in three major lines of professional activity: i) planning, as planner and/or adviser for both the administration and private agents; ii) management, from the public administration or from the exploitation of tourism uses and activities; iii) divulgation, also from both the public administration and the private sector in tasks of information or marketing. In summary, the "units of competence" which this study determined for tourism managements were the following<sup>2</sup>:

- To advise upon the planning and supervision of tourism use.
- To advise upon the implantation of tourism infrastructure.
- To organise and direct the exploitation of tourism infrastructure.
- To organise and direct complementary activities.
- To sponsor projects for the exploitation of productive resources and advise upon their management.
- To communicate and promote tourism resources.

Lastly, it should be emphasised that in the process of identification of the interested parties, and the demarcation of the relationships among them, it will also be necessary to take into account the assumption of some of these functions by other administrations or organisms which, although they do not play a direct role in the tourism development of the natural parks, do however have a direct influence. Such is the case, for example, of the network of Provincial Units for Employment and

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<sup>2</sup> As can be seen, the result is very similar to that obtained during our research, in which we also employed a similar methodology (surveys and panel of experts).



Local and Technological Development distributed throughout Andalusia which, among other objectives, respond to the need for socioeconomic and entrepreneurial stimulation in the provinces of Andalusia. This is a function, therefore, which, in principal, appears to be covered; however, the survey we undertook reveals great discontent on the part of the Protected Area Managers of the natural parks with regard to the coordination with the Regional Ministry of Employment and the former IFA (two of the principal administrations hierarchically superior to these Units) when establishing criteria for the granting of subsidies to entrepreneurs in these areas. Consequently, it will be necessary to improve coordination with such organisms and redefine the functions of tourism manager in these cases, aimed more at establishing guiding criteria for the activity of these other organisms in the framework of the natural parks.

### III.3. The financing of the natural parks

The final decision to take regarding the execution of the Tourism Management Plan concerns the source of the economic resources required for its implementation. In this regard, we may consider two possible scenarios, which are however consecutive in time.

Our Delphi analysis had already identified the unwillingness of visitors to these areas to pay for the majority of services received in a natural park and, naturally, their refusal to pay for entrance. Thus, in principle, self-financing is unthinkable in circumstances such as the current ones. However, it is also clear that the public budget is incapable of bearing the cost of the active tourism management of these areas, especially in an Autonomous Community like Andalusia, which has such a high number of protected areas, many of which are experiencing increasing demand for tourism-recreational use.

It is thus obvious that sooner or later the possibility of obtaining revenue from sources other than the public budget must be considered. This situation is recurring in an increasing number of national systems of protected areas throughout the world.



Our proposal is based on an initial system of public financing, using the instruments currently available, to then progressively incorporate different mechanisms of self-financing to guarantee an increasing volume of revenue for each natural park in order to consolidate the tourism management model. To achieve this, there exists a wide range of possibilities and experiences of application at worldwide level.

Whatever the case, a proposal of this type requires, on the one hand, an initial commitment on the part of the environmental administration to respect, at least, the autonomy in the management of expenditure and revenue on the part of each natural park and, on the other, an enormous task of convincing the awareness of visitors, entrepreneurs and local residents of the correctness of this strategy<sup>3</sup>.

The initial public financing may come from one of the two higher levels of tourism planning. On the one hand, by the declaration of a natural park as a Zone of Preferential Tourism Action, which would necessarily be accompanied by the immediate implementation of an Integrated Tourism Action Plan, which in turn would take the form of the Tourism Management Plan referred to earlier. On the other hand, the Plan for the Encouragement of Ecotourism provides for the possibility of designing and executing plans for the stimulation of ecotourism or active tourism product (Secretaría General de Turismo, 2004: 64). These stimulation plans may also take the form of the Tourism Management Plan.

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<sup>3</sup> There are already many examples of natural parks in which visitors show a willingness to pay much more than the established fees, due to a significant improvement in their management (and, as a logical consequence, of the tourism experience) as a result of greater resources. This allows greater revenue to be generated while maintaining the number of visits and improving tourism management (see, amongst others, Brown, 2001; Eagles *et al.*, 2002; Font *et al.*, 2004).





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