

## A MULTI-PERSPECTIVE APPROACH TO IMPROVE ROMANIAN PARKS' MANAGEMENT PLANS

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### Abstract

This paper attempts to reveal and analyze several perspectives of national and natural parks in Romania, as key tools for the process of management planning. A proper evaluation of the national and natural parks involves a complex process, to which specialists from several domains should participate. The perspectives were identified based on the current and potential benefits of Romanian parks: environmental, social and economic benefits. Results reveal that a three perspective model would represent a valuable source of information for managers, among which special attention should be given to the economic side.

**Key words:** management plan, parks' benefits, Romania, national parks, natural parks.

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The classification system of protected areas established by IUCN (International Union for Conservation of Nature and Natural Resources) in 1994 was based on the primary management objective. In Romania, the category 'national park' corresponds to the II<sup>nd</sup> IUCN category, respectively national park, and the category 'natural park' corresponds to the V<sup>th</sup> IUCN category, respectively protected landscape/seascape.

The management objectives of national and natural parks are stated by O.U.G. 236/2000 and established at the level of each park by the park's administration. Management plans have been developed for some parks, but still under the process of being approved by the government. However, none of the proposed management plans include all current and potential benefits of the parks, as it is recommended by IUCN.

National and natural parks are complex public goods. Their proper evaluation involves a complex process, to which special attention should be given. The key to an efficient evaluation of such goods is to recognize the need of specialists from different domains, each with great potential of offering valuable information for the parks' management plans.

The aim of this paper is to reveal and analyze each potential perspective of the parks. The question is whether the perspectives should be treated separately or considered as cross-disciplinary domains. The investigation will be underpinned in the context of the management of national and natural parks in Romania.

### MATERIAL AND METHOD

A careful analysis of the problem has lead to the conclusion that an efficient evaluation of Romanian national and natural parks may be the result of three perspectives. Each of the three perspectives is discussed in terms of theoretical aspects and researches conducted. At the end, a three perspective model is developed and proposed to be integrated in the decision-making process at the level of the park administrations. The final effect is expected to be the improvement and/or development of management plans for the researched areas.

The analysis of each perspective was conducted based on information collected after a detailed literature review of theoretical and practical aspects related to all benefits of Romanian public parks. It should be noted that many international studies show the importance of including economic values in the management plans of protected areas, as a result of the fact that for many years, particular consideration was given to environmental protection. This action was observed worldwide, without acknowledging the importance of knowing the real economic values associated with the goods and services provided by the nature. Only in the late '40s, U.S. researchers have proposed several methods to be used in determining the real economic values of such goods (Champ et al., 2003). These methods are know as non-market valuation methods and may be applied to state and/or reveal the economic values, depending on the study case. Unfortunately, in Europe such studies have started only in early '90s with tiny steps. Lately, researchers focused their activity on the valuation

of European natural resources, the importance of such studies being recognized.

A fundamental resource is the research performed by the author under a national grant, entitled "Economic valuation of national and natural parks in Romania", where the main task was to determine the economic values of national and natural parks in Romania using a significant data base and the non-market valuation methodology (project type CNCSIS TD 2007-2008). The estimated welfare measures are the consumer surplus per trip (emphasizing the actual tourists' behavior), the median willingness to pay per trip when the travel cost increases (considering distance as main factor on travel costs) and the marginal willingness to pay for several characteristics of natural public areas (considering tourists preferences during their trips). (Dumitras, 2008). The estimated economic values represent decision factors for parks' management plans.

## RESULTS AND DISCUSSIONS

The perspectives were identified based on the current and potential benefits of the parks: environmental, social and economic benefits. Following each of these perspectives will be discussed in the context of the process of management planning.

### 1. Environmental perspective

Environmental perspective focus is put on the protection, conservation and improvement of environmental values of the national and natural parks. Romania has benefited of several national and international projects on biodiversity conservation and prevention of degradation, among

which the Life+/Life Natura had a significant input for Romania.

These projects have given the opportunity not only to proper preserve the nature, but to know and better appreciate the natural resources as well.

From the environmental point of view, parks preserve biodiversity, protect flora and fauna species, maintain and provide ecosystem services such as clean air and water. It is important to notice that, in Romanian public parks, the management actions conducted by park administrations in the last decade, by imposing more restrictive uses of natural resources and building information points, have induced tourists a better appreciation and understanding of environmental issues. Emphasizing benefits obtained by tourists by performing recreation activities indirectly contributes to the justification of environment conservation (Eagles *et al.*, 2002).

A recent study shows that more than 70% of respondents consider noise caused by other tourists as being not pleasant at all. About 90% of respondents declared that it is not pleasant to find garbage at campsites. Clear air is highly appreciated by more than 95% of the respondents. Seeing flora and fauna species are stated to be very pleasant. (Dumitras, 2008).

### 2. Social perspective

The social perspective refers to the recreational and social opportunities given to tourists and local communities. Tourism and recreation are primary management objectives for both national and natural parks (IUCN, 1994).

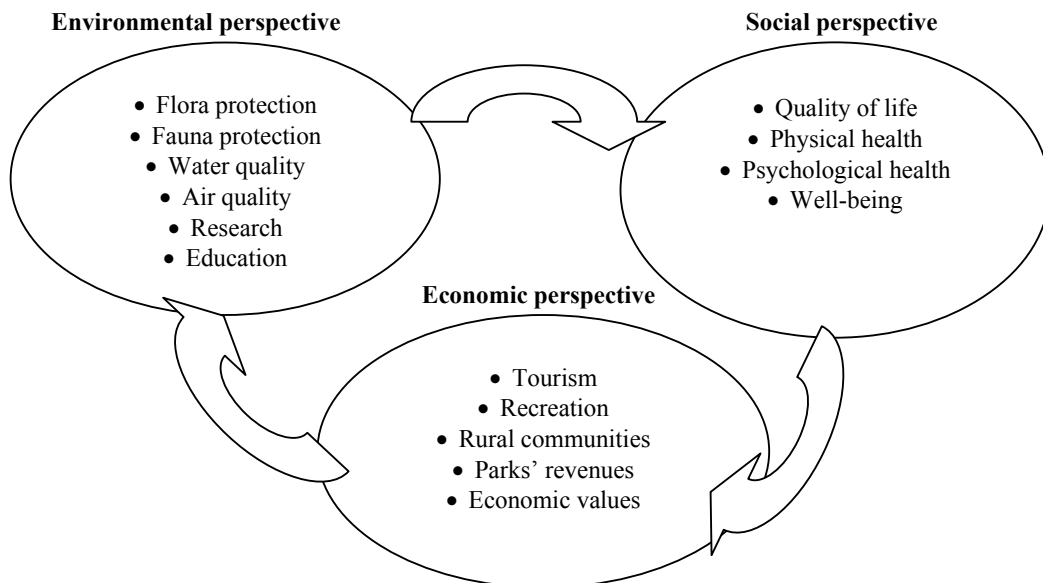


Figure 1 Three perspective model of national and natural parks

There are a significant number of recreation activities that may be performed during the trips, each park allowing specific activities, some with strict instructions. The trips in the parks have also a great impact on the psychological health, especially nowadays when people become more and more stressed at their workplace. Another benefit may be observed by the opportunity to discover the nature through research activities and/or educational programs (e.g. Darwin project - youth implication in the management of Rodna Mountains National Park)

The same study indicates that more than 88% of respondents have stated that their physical health has improved during the trip. This is the case of mental well-being improvement as well. Taking trips in the parks is a great opportunity to socialize, as 65% of respondents have reported (Dumitras, 2008).

### 3. Economic perspective

There are several main issues to be emphasized when discussing the economic perspective. The first is the impact of tourism on the rural communities situated inside and near the parks. The Romanian rural communities are facing many economic challenges; therefore the improvement of social welfare is a necessity for the rural communities situated inside and near the parks. There are expectations that these protected area categories contribute to the economic development of the communities. Thus, it is imperative to study and assess the impact of protected areas to the economic development of the rural communities. Unfortunately, not enough interest is given to this issue at national level. It is common known that there is much interest for problems regarding the ecological aspects (conservation of the biodiversity, protection of natural resources), which are considered by many as being sufficient in generating or adapting policies in this domain (Nistoreanu *et al.*, 2003). However, tourism in national and natural parks becomes more and more a very important decision factor in the sustainable development of such areas, mainly due to the contribution to the economic development of the country.

The increase in the number of tourists is a challenge for park managers, local communities and tourism industry, the task being to maximize tourists' needs under conditions of minimizing negative impacts on natural and cultural resources, and on communities. Under the conditions of implementing the sustainable development principles, tourism may become an important source of benefits for parks and the local economy, with positive influences on the national economy.

Definitely, information of tourists and imposing use restrictions of natural resources play an important role in the conservation of the environment. It can be said that there is a balance between tourism and environment that tries to find equilibrium between environment development, on one side, and maintenance of environment health, on the other side.

The second issue to be discussed is represented by the potential sources of revenues for Romanian national and natural parks, as a result of proper management practices that may assure a continuous flow of sells of goods and services without diminishing the value of the protected area, with the opportunity of directing the revenues obtained towards the process of conservation of the respective area (IUCN, 1998). The economic valuation process represents also a key element in the sustainable rural development of protected areas.

The last and most important issues is the recognition of the importance of the economic valuation as crucial source of information for managers in the decision-making processes taken at the level of the parks (e.g. the development and management of the areas, the establishment of equilibrium between the conservation of natural resources and infrastructure development etc.).

The economic valuation offers information about the goods and services of protected areas, the values associated by individuals to goods and services, which groups may obtain more benefits from the alternative uses of the areas, the groups that represent possible threats for protected areas, the information as decision factors in the management of the areas. The information obtained through the process of economic valuation may be used by decision makers to establish if demand is different among several user types and among several public areas as well. Moreover, knowledge of preferences of potential tourists allows management actions to be adapted and/or developed such as an ideal area is 'created' for each segment or groups of users by using more efficiently the natural resources for recreation.

Results of the study conducted on Romanian parks indicated that the highest consumer surplus values were obtained in the case of tourists from Domogled-Valea Cernei National Park and Bucegi National Park, with a surplus of 50% higher than respondents from Porțile de Fier Natural Park, which was 103.99 lei. In the case of Cozia and Piatra Craiului national parks, consumer surplus per trip is 120.08 lei and respectively 132.61 lei. As regard to the tourists' willingness to pay, in the case of Bucegi National Park and Cozia National Park it was, on average, three times less than in the

case of Piatra Craiului National Park, where were registered values between 63.99 lei and 75.62 lei depending on the distance traveled (Dumitras, 2008). Marginal willingness to pay values for several characteristics of natural public areas were calculated based on a hypothetical frame using different scenarios. The results indicate that people have different preferences for visits to public natural areas and different expectations for services offered. All these information may serve as key information in the process of management planning.

Furthermore, economic valuation of Romanian national and natural parks may represent a source of information that justifies from an economic point of view the need of funding projects. Once the funds are obtained, the administrations of the parks confront themselves with the issue of optimally distributing the funds. In most cases, parks administrations are constrained by insufficient budgets in the moment of taking decisions. Under budget constraints, an efficient distribution of funds should be done based on costs and benefits evaluated in the case of each proposed alternative. The costs and benefits analysis may be sometimes a difficult stage and even impossible due to the specific characteristics of public goods. Often, only the valuation of costs is emphasized and the economic valuation of benefits gained from the use of the respective resource is omitted.

According to Moons (2003), the estimated economic values have four important roles:

- contributes to debates at national level regarding environmental issues

- influences some decisions by costs and benefits comparisons

- contributes to the identification of the optimum alternative from the existing alternatives in the competition

- supports and justifies decisions taken at national level.

Definitely, these roles are accomplished only when importance is given to the estimated values and are introduced in the decision processes at local and national level.

The economic valuation is an important process for managers because it supports requests for funding from traditional sources, identifies additional sources of finance, determines factors that represent threats to protected areas, indicates ways of capturing values of beneficiaries and guides management practices (IUCN, 1998).

## CONCLUSIONS

The results of this study lead to the proposal of engaging specialists from several domains in the process of management planning of national and natural parks in Romania.

This will certainly lead to an improvement of the management plans if all current and potential benefits of the parks (environmental, social and economic benefits) will be included in the process.

The efficiency of applying the three perspective model mainly depends on the quality of work performed by all stakeholders involved in the process. The applicability of such model remains in the attention of researchers; in fact it is part of an ongoing research project conducted at national level by the author. Proving the efficiency of the model will represent a fundamental rationale for further investigation on how to adapt the model for other protected areas.

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