SUSTAINABLE MANAGEMENT STRATEGY OF PROTECTED AREAS IN ROMANIA

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Abstract

The sustainability manifested locally expanded to national, outlining the context of Romanian tourism industry under guidance protection, conservation and regeneration of environmental resources.

The paper analyzes the evolution over time of the number, and surface of protected natural areas, being a reference point in the direction of strategic management thinking of tourism in the protected areas in Romania under the spectrum of sustainability, leading to a quantitative development and qualitative at high levels. The analysis of the number and surface of protected natural areas is through the data retrieved from the database Tempo-one line from the NIS.

Keywords: sustainable development, protected areas, tourism activities

JEL Classification: Q01, Q57, L83

1. Introduction and literature review

Sustainability as a model of tourism development should result in a more complete integration of all its tourism activities in the environment they come into contact and relationships that this area is developing with other spheres of activity.

Considering that literature although some differences arose regarding the terms used for components of sustainable development, there are also common information describing sustainability in terms of three dimensions (Chapy, 2009; Von Hauff & Kleine, 2009, p. 10; Raderbauer, 2011; Research Project SIGMA, 2001): economic, social and environmental.

Research and innovation in promoting sustainable tourism is a present concern addressed both externally and internally.

Protected natural areas is an important element of tourism that the specific nature and tourism resources contribute to shaping and running of tourism sustainability (Zaharia & Gogonea & Enachescu, 2015).

In this context, it is necessary to specify the heady important role that it has the green economy within the protected natural areas. The green economy, as stated Von Hauff and Kleine (Von Hauff & Kleine, 2009, p.31) should create renewable resources in conditions that would require this fact, when the use of renewable resources that are renewable is shrinking, and to ensure that emissions have a negative impact on the environment.

In this context, both the number of protected natural areas surface can be directly involved in management decisions to implement them in the strategic development of sustainable tourism.

If between 1990 and 2000 tourism has experienced a continuous process of restructuring, with impact on employment (Zaharia & Bălăcescu & Gogonea, 2014) and reshaping the strategic base for its development after 2000 gradually resorted to strategies focused its development with durable and sustainable connotations.

This justifies period analysis of the development of natural protected areas from 2000 to 2013 through its main indicators: number and size.

Analysis of the number and areas of protected natural areas is done in order to outline an evolutionary trends over time, allowing an orientation of sustainable strategic management decisions through information and statistical data retrieved from the database Tempo-one line provided by Institute of National Statistics (NIS).
2. Evolution of the number and size of protected natural areas

Romanian tourism practice orientation effects in protection, conservation and regeneration of environmental resources are highly noticeable in the protected natural areas.

Developing recreational tourism activities in space-protected natural areas requires special measures regarding the protection, conservation and restoration of sites, and property of their natural heritage.

In this direction, in 2007 was designed Ordinance no. 57 Government of Romania, through intermediate which was defined protected area and has outlined a National Strategy for the Development of Ecotourism in Romania which included a differentiated regime of protection, conservation and use by main categories of protected areas:

- national interest: scientific reserves (IUCN category I), national parks (IUCN category II), nature reserves (IUCN category IV), parks (IUCN category V);
- international interest: natural World Heritage sites, Geopark, wetlands of international importance, biosphere reserves;
- community interest and sites "Nature 2000" sites of Community importance, Special Areas of Conservation, Special Protection Areas Bird;
- The county or local interest: set only on public / private administrative-territorial units, as appropriate.

The analysis of the number and areas of protected natural areas are carried out in relation to the classification of the main categories above

At the database level Tempo-one line of NIS, scientific reserves are presented as "protected areas aimed at protecting and conserving natural habitats on land and / or water, containing elements that are representative of their scientific flora, fauna, geology, spelunking, paleontological, pedological or otherwise ".

Presentation of nature reserves in the same source involves defining them as the "natural protected areas whose purpose is the protection and preservation of important natural habitats and species in flora, fauna, forestry, hydrology, geology, caving, paleontological, pedological".

Specifically, both the number of scientific (45 scientific reserves in 2013) and the natural (671 natural reserves in 2013) is very difficult to establish but significant for the presentation and analysis is the main indicator of characterization: area.

Their position in the same category of protected areas and areas of expansion proxies allowed representation both on the same graph (Chart 1).

Graphical representation reveals a general trend upward of both types of protected areas from 2000 to 2011 when faced with a sharp drop process. Significant reduction of the surface may be the result of their output from the protected natural areas category as a result of deterioration in weather conditions that led to natural disasters (eg. landslides), gets its great contempt and disregard for the principles of conservation of the natural environment or from locals, tourists.

Two types of protected areas are represented by national parks (13 national protected areas in 2013) and the natural (15 natural protected areas in 2013).

National Park defined in the database Tempo-one line of NIS as the space in which "are protected and preserved representative specimens for national biogeographic space, including natural elements of particular value in terms of physical geography, flora, fauna, hydrology, geological, paleontological, speleological, pedological or other,
offering also the possibility of visiting for scientific, educational, recreational and tourism. However, natural parks are described as "protected areas for the protection and preservation of landscape piles in which the interaction of human activities with nature over time has created a distinct area with significant landscape value and / or cultural, often with a biological diversity."

In 2013, in Romania were introduced to the touristic following national parks: Retezat, Rodna, Domogled - Cerna Valley, Nera - Beusnita Semenic - Caras Gorge, Ceahlău, Cozia, Călimani, Piatra Craiului, Bicaz - Hasmas Macin Mountains, Buiu-Vanturarita and Jiu Valley. In the same year, the parks are reported: Grădiștea Muncelului - Cioclovina, Iron Gates (Portile de Fier), Apuseni Mountains, Brăila Lake, Bucegi Mountains, Maramureș Mountains, Vanatori - Neamt County, Mehedinți Plateau Geopark, Dinosaurus Geopark in Hâțeg County, Mures Meadow, Lower Frut Meadow, Comana, Putna-Vrancea, Upper Mures Gate, Natural Park Cefa.

In Chart 2 presents the evolution of scientific and natural protected areas that from 2000 to 2003 did not suffered any change (2177 ha), while in the coming years is experiencing a slight increase in 2008 and 2009 when it reaches the maximum value of the surface (96,228 ha), followed by a gradual reduction until 2013 when it reaches an area of 15413 ha.

Trends in national parks area during 2000-2013 follows a linearity, extending their values oscillating easily around a yearly average of 3810 ha. In parallel, the same amount of surface analysis of natural parks face a significant growth process in 2004 to 401,966 ha, then slows down, the difference from 2013 to 2004 was only 44,538 ha.

Also in the category of natural areas of national interest are included and natural monuments (206 natural monuments in 2013) which have a definite purpose database Tempo-one line of NIS, consisting of "protection and preservation of natural elements and ecological significance, scientific, significant landscape consist of species of plants or wildlife, rare, endemic or endangered, trees, flora and fauna associations, geological phenomena - caves, by erosion, gorges, rivers, waterfalls and other events and geological formations, fossil deposits and other natural elements natural heritage through their uniqueness or rarity."

In Chart 3 presents the evolution of natural monuments surfaces that from 2000 to 2003 did not suffered any change (2177 ha), while in the coming years is experiencing a slight increase in 2008 and 2009 when it reaches the maximum value of the surface (96,228 ha), followed by a gradual reduction until 2013 when it reaches an area of 15413 ha.

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The protected natural areas included international biosphere reserves involving "the protection and preservation of natural habitat areas and specific biological diversity" as defined in the database specified Tempo-one line of NIS.

In 2013 there are recorded for Romania the following three biosphere reserves: the Danube Delta, Retezat and Rodna.

After a slight decrease of 14,554 ha in 2001 compared to 2000, the biosphere reserves surfaces not know any modification, maintaining the entire period of analysis at 664,446 ha.

About the natural protected areas of international interest an important mention is about the wetlands with international value, in order "to protect natural sites with biodiversity conservation wetland" (defined database Tempo-one line of NIS).

The total area of 616,571 ha of wetlands of international importance, introduced only in 2007 tourist circuit remains unchanged until 2011, after which it will gradually expand from year to year until 2013 will be with 408,589 ha higher (chart 4).

Also from 2007 is placed in the tourist circuit, with a corresponding record data, Bird Special Protection Areas are defined by the database Tempo-one line of NIS as "protected areas aimed at the preservation, maintenance, and where appropriate, restored to a favorable conservation status of the bird species and specific habitats designated for the protection of species of wild migratory birds ".

The development of Bird Special Protection Areas (chart 4) is the same of 2,992,798 ha from 2007 (Year thereof) until 2010. Starting with 2011 until 2013, there is an increasing trend, with about 710,019 ha.

Introduced in 2007 all the tourist circuit as wetlands of international importance and Bird Special Protection Areas, Sites of Community Importance are "areas which bio-geographical regions where there are significantly contribute to maintaining or restoring the conservation status favorable natural habitats "(defined database Tempo-one line of NIS).

Also for these areas is reported similar increases as for the Bird Special Protection Areas (chart 4), with the following records: from 2000 to 2010 the area was 3,284,092 ha, and in 2011 will increase until 2013 when it will be of 4,147,368 ha.

In conclusion, the two indicators for the characterization of natural protected areas (number, as surface) are elements which, in relation to their development, can contribute to sustainable tourism strategic management decisions.

3. Strategic Guidelines for sustainable management

The analysis of the number and areas of protected natural areas is the foundation of strategic directions managerial orientation towards sustainable development of these touristic destinations.

Number and area of protected natural areas have to deal with a process of territorial distribution as uniform as to satisfy the condition of sustainability is imperious required to be satisfied, given the need for transmission to future generations the precious resources available to Romania.

Considering some common features between the protected natural areas and the countryside, organization of tourism in these types of areas can be targeted in relation to the functions that can be performed by a rural area to satisfy the requirements of sustainability.

Rural tourism space functions included in the rules of the European Charter of Rural Area comprises three levels: economic, ecological, socio-cultural. Adapting these functions in the space of protected natural areas management decisions can lead to orientation towards sustainable tourism development.
The economic function of protected natural areas must meet the needs of any local, regional, national through mutual interdependence of human and financial plan regarding environmental protection.

This context allows to outline a system that is interdependent: the variety of activities undertaken in and around protected natural areas, ensuring that human resource income to provide at least a decent life and protection and regeneration of resources involved in that trigger economic strategy towards shaping the sustainable development of tourism.

Regarding ecological function, it can highlight its main aspect, which is the quality of the environment, taking into account the perspective of regeneration, as following:

- conserve natural resources of protected natural areas (air, water, soil);
- protecting biodiversity, biotypes and green spaces;
- protecting animals.

Socio-cultural function of each community concerns around the protected area to ensure and develop various socio-cultural activities that allow the protected area to accomplish a touristic value, and to be implicitly inserted in touristic circuits.

These functions are contained in the application and reached a sustainable management which can be shaped by three complex components: local, global and touristic management (Fig. 1).

The problem of pollution and destruction manifested nationally and globally, requires its orientation towards sustainability, which is controlled by a well-organized management, allowing shaping a viable strategy and enforceable.

**Fig1. Reference elements of strategic management**

The correlation of global management components with the local and tourism management is directed to five reference elements:

1 – the implementation of interdisciplinary research centers, that would require the correlation between tourism-nature-science-sustainability, especially developing research projects with personalized local applicability; although increasing economic activities in the areas and in the flow of vehicles, persons and goods represent different types of risks, firstly for the natural protected area. In this context it is a must to adequately control the activities in the area.

2 – the development of educational centers for tourism activities management that would take into account the human resources involved in the tourism offer, but also the one representing the tourists, using the specific resources from the sustainability point of view;

3 – the optimization of the tourism areas by management solutions that leads to monitoring and managing tourism resources, tourism activity in the area in order to integrate the tourism activities in wider circuits, but also to control the local tourism activity without disturbing the protected areas. Besides the natural protected areas, more cultural interest points can be developed, the most important being Prejmer fortress, but not the only one.

4 – the attraction of tourists interested in ecotourism, cultural tourism, hunting tourism and other types of tourists that love and respect nature;

5 – the business finance management– should be directed towards the implementation of a funding system for area maintenance. This fund can be obtained from the collaboration with the local authorities and also from the tourism activity.
4. Conclusion

The majority of protected natural areas, on the whole, were faced with a process of increasing oscillating surface. There are exceptions noted: national park area has experienced a slight reduction in average 3810 ha/year, representing a decrease of 1.07% relative average; although in 2008-2010 scientific reservations surface experienced the significant increase (from 96 in 1992 to 310,000 ha), is a drastic decrease in the coming years reaching 25 thousand hectares.

Both the potential and the results are presented as an important tourism factor involved in the development process outlined through sustainable management strategy.

Primordial satisfactions concerning the practice of tourism in protected natural areas, must be closely correlated with the results of other plans that are interrelated.

Management of tourism in protected natural areas should place particular emphasis on developing of access to various points of interest without endangering natural equilibrium. The next step would as the stimulation of various types of tourism, friendly to the environment and local communities. In the medium and long term, an important issue is the management of tourist infrastructure for accommodation, food and entertainment in the context of sustainability.

Shaping a sustainable management system for new areas should be stimulating, primarily for tourism activity in the context of adequate protection of the environment.

In the long run it would stimulate other economic and socio-cultural activities, contributing to the sustainable development of these areas.

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