



3rd GLOBAL CONFERENCE on BUSINESS, ECONOMICS, MANAGEMENT and TOURISM,  
26-28 November 2015, Rome, Italy

## Management of sustainable development in ecotourism. Case Study Romania

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### Abstract

The paper presents specific elements knowledge management applied to a current component of tourism in order to provide its sustainable development process. It shows the current status of natural areas in Romania and the development of ecotourism activities in specific geographical areas of relief. The set of policy proposals for recovery efforts oriented ecotourism in how to ensure sustainable development. The purpose of implementing knowledge management in ecotourism is to promote and develop ecotourism by increasing the number of tourists, increase the economy, protect and preserve nature, to ensure long-term contributions. In Romania be it about mountains, rivers or other natural landforms do mention that they have a territory spreading that favour the development of tourism as an industry, sustainable development aims to develop specific strategies for medium and long term oriented in two separate discussion: - Annual growth in the number of tourists visiting Romania, - Providing attractive new locations. The evocation of these arguments is a motivation for the development of ecotourism in Romania. In the present work will present specific issues areas: Danube Delta Reservation, National Park Retezat. Aim of the study is to realize foreign tourists, citizens of Europe, and why not the world of the natural beauties of Romania, and also to create in Romania, in tourism, both in terms of openness to visitors, and in promoting the idea of finding new solutions to promote eco-tourism, and tourists to change attitudes towards the natural beauty of Romania. It outlines the obligations of managers in the field to increase quality ecotourism. Presentation ecotourism benefits and specific objectives and implementation strategies for the development of ecotourism are the objectives of this work. The presentation will open a "window" for the incomparable beauties of Romania.

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Peer-review under responsibility of the Organizing Committee of BEMTUR- 2015

*Keywords:* sustainable development, eco-management, Retezat Nature Reserve, Danube Delta

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## 1. Introduction

Tourism is the sector with the most dynamic development; sustainable tourism development is a necessity.

Development of tourism activities needs to pay particular attention, firstly, to the quality of the environment through measures aimed at its conservation and development.

Sustainable tourism can be defined as the development of all forms of tourism that respect the natural, social and economic integrity of the environment, to ensure the exploitation of natural and cultural resources for future generations.

There are a number of components in order to develop a strategy for achieving sustainable tourism, namely:

- respect and care for the environment,
- rationalizing the exploitation of exhaustible resources so as to preserve the sustaining capacity of the planet,
- conservation of Earth's ecosystem and human biodiversity,
- establishing possibilities for communities to preserve its environment.

Ecotourism is actually the most valuable manifestation of sustainable tourism. Romania has a unique natural and cultural heritage that can become a special attraction for international tourism, given the current trends worldwide, which target tourism flows to destinations with natural potential tourism. Socio-economic and European integration bring many threats to nature conservation in the Carpathians and Danube Delta, but at the same time offer a series of opportunities.

The development of ecotourism can be considered the main opportunity offered by the current economic context since this form of tourism brings significant socio-economic benefits with minimal investment by using in a sustainable manner the natural tourism potential and is a tool for nature conservation and local sustainable development.

Romania has about 800 protected areas currently covering about 5% of the country.

Most ecotourism destinations are located within or close to these protected areas, such as the Danube Delta Biosphere Reserve, the “paradise of birds”, or Retezat National Park –the oldest park in Romania. It should also be pointed out that in our country there are still un fragmented forests, over a third of the population of bears and wolves in Europe, unique paradise of birds in the Danube Delta, more than 12,000 caves and, last but not least, authentic local traditions such as in northern Maramures and Transylvania. Ecotourism allows valorisation and preservation of this natural capital.

Over time, it became apparent that in order to conceive, to achieve and maintain at an accessible level the ecotourism destinations, relevant investments are needed in the following directions:

1. The need of investment in certain values, which often for investors (in this case private individuals or families) are not available, not even through bank loans. This is mostly because the return on investment in this area is quite slow. Moreover, the Romanian state, along the last twenty-five years has allocated only to a small extent funds for such activities. During the years 2010- 2013 in Romania a timber volume of 73,212 cubic meters was harvested, a deforestation area equalling 600 football fields. In the same period, the state investments in environmental protection, forestry and logging were more than modest: 72.927 lei in four years.
2. Another direction was the legislature. Over the years, taking into account the so-called economic arguments, which favoured certain political groups, and which took advantage of a legal vacuum artificially supported in Romania, important areas were sacrificed, detrimental to the development of ecotourism destinations. The champions of these destructive actions, carried out with the tacit consent of the governments of Romania, were both Romanian national companies (Romsilva) and multinational companies, starting with Holzindustrie Schweighofer from Austria.

## 2. Retezat Nature Reserve

One of the most important reserves in our country has an area of 20000ha, located in the South West of the county Hundoara.

In this park are 82 glacial lakes including Lake and Enjoy (2041 m altitude) is the largest lake in the country with an area of 11 hectares and a depth of up to 16m and Taul Black Lake (2014 m altitude) with an area of 7.5 ha, the deepest in the Carpathians (25,5m). In Retezat are spread over 320 plant species of which 15% are endemism Carpathian, 12% and 4% Dacian own endemism Retezatului.

Floriculture is the treasure of Retezatului Hierocium. The mammal is typically Retezatului chamois, which shows ecotype recognized as the most valuable in the world.

It was founded in 1935 at the initiative of professor .Alexandru Borza, Botanical Garden founder of Cluj-Napoca.

Currently the park has protected area status of national and international interest. The establishment of the park was intended to protect and conserve natural with outstanding value in terms of physical geography, flora, fauna, hydrological, geological, and landscape.

### *2.1. Opportunities for tourism development of the National Park Retezat*

Retezat National Park is endowed with a rich and varied natural tourist resource, which gives a great Available for tourism

The tourism potential is materialized in various forms of relief and picturesque landscapes that meet in a variety of forms of tourism, varied motivations of Romanian and foreign tourists.

To exploit and develop tourism in National Park Retezat I came up with a set of proposals and modern methods of tourism planning.

We propose a sustainable model by building guesthouses that offer a high degree of comfort and to provide tourism services, namely services (recreation, leisure, herbal and organic food).

For a long-term sustainable development is proposed arranging a resort specializing in recreational sports and adventure, it is proposed the creation of recreational areas and destinations accommodation and restoration. Access to this resort will be done by setting up a modern infrastructure networks. The pension will be built in the town Cârnic, where it will propose and develop it as a resort because of the increasing importance of the area which also has a bioclimatic air cleaning and ozone.

In the guesthouse there will be a tourist information centre and organizing activities aiming at receiving tourists in the tourist town of sausages. Pension is open to all categories of tourists lovers of nature, art, culture and rural tourism.

### **3. Presentation of the Danube Delta Biosphere Reserve (DDBR)**

The Danube Delta is one of the largest deltas on the European continent and at the same time, the best-preserved wetland in Europe. The Danube Delta ecosystems, diverse and with a "mosaic" type discontinuous distribution, create a framework apart from other biomes of our country.

The Danube Delta natural paradise lies at the mouth of the Danube to the Black Sea, where the river ends its long journey of 2860 km (1788 miles) from its source in the Black Forest in Germany. For centuries on end, the Delta has expanded surface, thereby forming a network of channels, lakes, reed isles, tropical woods, pastures and sand dunes.

The Danube Delta is one of the largest deltas in Europe, including wetlands of the least disturbed by the mainland. The mosaic of habitats developed here is the widest in Romania and hosts a wide variety of plant and animal communities whose number exceeds 5,500 types. About 70% of delta vegetation is dominated by reed, rush and reed vegetation on the islets. In lakes and canals, aquatic plants can be met, represented by species such as the white lily, the yellow water-lily, the water arrow, etc. A separate category is formed rootless plants, floating plants.<sup>1</sup> Willow forests grow along higher banks, while the small grey willow grows along the lower banks. In Letea and Caraorman forests, developed in the lowlands and wetlands between the sand banks, known as "hasmace", a variety of species can be met, such as the oak, the ash, shrubs or climbing plants, including the wild vine or liana.

#### *Fauna*

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<sup>1</sup> Cross border cooperation in nature protected areas in Danube Delta and Lower Prut op. Cit., pag 23

Due to favourable conditions created by the great variety of terrestrial and aquatic habitats, as well as the proximity to several sub-areas of the Palearctic fauna region (e.g. The Mediterranean, Black Sea, Eurasian) DDBR fauna is represented by more than 3,600 species. Invertebrates form by far the largest part of DDBR fauna, with more than 3,000 species. DDBR fish fauna has a remarkable variety, comprising 84 species included in 22 families. Most of them are freshwater species, but are also represented by marine species and species living in the Black Sea, entering the Danube Delta during the breeding season. Amphibians are represented by 8 species of frogs.

DDBR remains however most famous for the ornithological fauna, 315 species being recorded in total (except the 520 species recorded in all of Western Europe). The area has a universal significance for nesting of many bird populations such as the white pelican, the Dalmatian pelican and cormorants. Important colonies of heron fallow gather here, and some nesting species of white-tailed eagle. The Danube Delta area is a major stopover, both in spring and autumn, for millions of birds, especially ducks, white storks and numerous species of birds of prey. In the winter season, DDBR hosts large groups of swans and geese, including nearly the entire population of the red-breasted goose. Mammals are represented by 28 species, including important species of European conservation, such as the otter and the European mink. The bison and the wild boar have an economic significance for fur and hunting. Other predators are represented by the ermine, raccoon dog, fox and wild cat.

The Nature reserves in the Danube Delta are Great Hăsmacu-Letea Forest (flora reserve) Matita (fauna) and Popina island (fauna).

#### The main natural attractions

The natural landscape of the Danube Delta is the main tourist attraction Danube Delta. It is an almost undisturbed landscape, which consists of a mosaic of arms of the river, canals, lakes of different types and sizes, sand dunes, and oak forests with Mediterranean vegetation.

The Danube Delta is also famous for being one of the largest wetlands on earth. Natural habitats formed here offer wonderful favorable living conditions for an impressive number of plants and animals. Reed here forms one of the largest large areas of the earth, and Letea and Caraorman forests represent the northern boundary of two of the rarest species of oak, which are most commonly found in southern Italy and the Balkan Peninsula. Together with a large number of aquatic and terrestrial plants, the Delta also shelters many important colonies of pelicans and cormorants, characteristic species for the Danube Delta, and a variety of waterfowl that visit or stop in the delta for nesting and wintering.

The richness in fish of the lakes, branches or canals in the Delta is another tourist attraction for both fishing enthusiasts and for those who like to taste traditional food prepared by the inhabitants. The coast, with very wide beaches and with fine sand, the calm waters and the shallow sea, also represents great attractions for tourists.

Tourist valorisation of the Delta enjoys international fame given by the unique character of this space that combines the existence of natural attractions of a scientific nature (bird colonies, lush forests, sand banks) with the recreational ones (fishing, beaches on the coast) and with the ethno cultural ones (derived from the composite character reflected in the ethnic composition and traditional architecture, traditions and customs). The main forms of tourism that may take place on DDBR are:

- *Rest and recreation tourism* (practiced by travel companies in one of the hotels from the reservation or using floating hotels, combining excursions on canals and picturesque lakes with sun bathing and marine water on the beaches located along the Black Sea coast.)
- *Discovery tourism (itinerant)* (practiced either individually or through organized trips) suitable for small groups of visitors who have the opportunity to explore the diversity of the landscape, combining manually propelled boat-trip son picturesque canals with walks along the channels and river banks and channels, etc.
- *Specialty Tourism* – scientific (for ornithologists, specialists, researchers, students)
- *Special programs for youth* (for knowledge, understanding and treasuring nature)
- *Rural tourism* (tourists can be hosted and guided by locals) has traditional roots in DDBR, many local families hosting and accompanying visitors in the Danube Delta. This type of tourism has significant potential for improving the incomes of local people.
- *Tourism for water sports, photo safari*
- *Tourism for fishing*, greatly appreciated by visitors of all ages, in any season, for any species of fish, and *sport hunting*.

In accordance with the evaluation criteria for the tourism potential of the areas – accessibility, tourism resources, accommodation facilities, unpolluted natural environment and possibilities for future investments, nine tourist areas were established within the reserve, which included from the beginning 7 tourism and leisure trails. Two of the main reasons for selecting this area have been to reduce the negative impact of tourism and to obtain better control of the activities of tour operators. In 2002, the number of authorized travel routes was supplemented due to the development of tourist offer for Delta. Currently, the total number of tourist trails in the Danube Delta Biosphere Reserve is of 19 aquatic routes and 7 land routes.

### 3.1. Opportunities for development of the Danube Delta Biosphere Reserve (DDBR)

Developing the tourism potential of the Danube Delta Biosphere Reserve can be done by a series of actions such as

- *promoting the quality of existing tourism products and introducing new local tourist products*
- *insisting on appropriate forms of ecological principles* (specialized tourism for ornithologists, naturalists, environmentalists, etc.), priority in promoting the organized tourism, scientific tourism in groups, rural tourism.
- *promoting helio-marine cures and combined programs “beaches and excursions”*, by arranging the beaches from Sulina and St. George, achieving a suitable transport for tourists beaches and cities, and introducing mud therapy in the Murighiol area, Sărături lake.
- *protecting the natural and cultural heritage*: the preservation of historical and cultural heritage, rehabilitation of museums and other public exhibitions, preservation of natural heritage, development of thematic circuits and tourist stays for various age groups to favour the wealth of the delta: its flora and fauna, heritage and archaeological remains of monasteries.
- *qualified human resources in the tourism sector* through training and preparation of the workforce for tourism and other services among the population.
- *constructing new accommodation units* in line with the specific architecture and landscape. Given the concentration of accommodation equipment on certain tourist areas, it is necessary to locate new accommodation facilities in other areas, for example in the marine-delta region (e.g. Periprava, Chilia, Letea, Caraorman). A great necessity regarding the ordering of individual movement is represented by the planning in these tourist areas (buffer zones) of ecologically and adequately equipped camping platforms (ecological toilets).
- development of rural tourism could be an alternative asset to the local population.

To develop this form of tourism already existing in the DDBR, and to introduce the area in the European ecotourism circuit, certain measures must be taken: organization, declaration and arranging some “tourist villages” in the delta; proper accommodation in the spaces offered by the locals, or searching for funding sources to improve the accommodation conditions, publishing informational and educational materials in foreign languages, properly trained guides among family members, etc.

To develop tourism according to the conditions for sustainable development in the area, an important role is played by the training of tourists and education of local population. After setting DDBR, it would be necessary to act on its popularization and on the need to protect and conserve the natural heritage. DDBR sustainable tourism requires organizing a potential tourism for tourists from Romania and abroad; it also requires education activities such as:

- elaboration and editing of maps, brochures, travel guides of the reserve, tourist code for visitors, etc.
- setting up several information and ecological documentation centres; in the area there are three centres, at Sulina, Crisan and Tulcea.
- setting up action cycles for tourist and ecological education for the local population, insisting on the necessity of protecting and conserving the tourism environment.

Of great importance for the development of a professional tourism, consistent with the reserve status of the Danube Delta, is the professional and managerial training of tourism providers within the reserve, and the formation of a body of guides who, besides basic training, have sound knowledge of the delta ecosystems, including their protection and conservation.

#### 4. Conclusions and Proposals

Retezat National Park may be developed as an inexhaustible source for sustainable tourism if two key conditions are met:

- finalizing the construction of the highway crossing the centre of Transylvania, and of the highway which links the North of the country with its centre;
- development and maintenance of an investment program for building guesthouses and small hotels adjacent to the park area, in order to benefit of its the natural resources.

The Danube Delta is a tourist area of great originality for the Romanian tourism; in terms of declaring it a biosphere reserve, tourism activity must be redefined in the sense of reconstructing the forms, means, ways and areas of tourism, as well as promoting this region on the tourism market.

This approach is based on three axiomatic considerations, namely:

- Danube Delta is a brand of the Romanian tourism, which is the only activity that does not affect local ecosystems.
- Rural tourism and agro-tourism represent one of the chances of relaunching the localities in the Danube Delta from a social and economic point of view.

Practicing and developing the tourism in DDBR in the future must be based on a strategy of development of a complex tourism offer, but also on a program that includes concrete measures and means of organization, based ecological revitalization and organizational principles.

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