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# ECOTOURISM ACTIVITIES – AN OPPORTUNITY FOR SUSTAINABLE RURAL DEVELOPMENT IN DOBRUDGEA

## ABSTRACT

Ecotourism is a new travel philosophy that combines recreation, education, active tourism, adventure and cultural aspects of a journey of discovery; it brings benefits to both tourists and visited areas. Global demand for this particularly promising niche is significantly growing and should continue to increase over the coming years. In this paper we present some aspects of the development stage of ecotourism activities within and around the natural protected areas in Dobrudgea – a historical province located in Romania's South-East extremity, as well as a set of proposals to orient the efforts of putting into value of these destinations through ecotourism activities, as an opportunity for sustainable rural development. For an increased relevance of the analysis, the information was obtained from studies and articles published in specialized journals, from governmental documents, as well as from other development strategies related to ecotourism and sustainable rural development. Taking into consideration the natural and anthropic tourism resources, the tourism types and forms and the tourism infrastructure, Dobrudgea is a region where ecotourism is an important instrument for preserving nature, educating visitors and supporting rural development.

Key words: ecotourism, sustainable rural development, Dobrudgea.

JEL Classification: L83, R10, Q01.

# **1. INTRODUCTION**

Tourism has become one of the socio-economic sectors that has undergone a major transformation. Although mass tourism remains the predominant form, preferences for other tourism forms have also emerged, satisfying the need to be close to the natural areas unaltered by the anthropic activity. Global demand for these experiences is expected to increase over the coming years, because the location in rural areas leads to the creation of a unique tourism service that satisfies the new needs for fresh air, unpolluted waters and nice places and landscapes at a relatively low cost. The fast-growing transportation industry and the free flow of information over the internet and different media are other factors supporting the development of this new segment at tourism industry level developed under the name of ecotourism.

The ecotourism and sustainable tourism practice has the potential to assist in conserving natural areas, reducing poverty, empowering women, enhancing education,

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and improving the health and well-being of local communities. This is considered to be the great challenge of ecotourism to support economic growth and settle the frame for effective environment protection, both from natural and social perspective.

## 2. STATE OF KNOWLEDGE

The tourism activities developed under the aegis of ecotourism provide tourism industry, tourists, authorities and local people with the possibility to cooperate for the organization and development of responsible journeys in natural areas unaltered by the anthropic activity, in order to admire the ecological richness, to study, to understand and enjoy both nature and cultural diversity, in a manner that will take into account the impact upon the environment, in the idea of maintaining the viability in the respective area for an indefinite period of time. (Nistoreanu, 2006)

Therefore, ecotourism is a form of tourism involving visiting fragile natural areas, clean and relatively undisturbed, with a reduced negative impact, being an alternative to mass tourism. Its purpose is to educate travellers, to provide funds for ecological conservation, to directly benefit the development and political empowerment of local communities, and to promote respect for different cultures and human rights.

Ecotourism focuses on social tourism, responsible personal development and environmental sustainability. Ecotourism typically involves travel to destinations where flora, fauna and cultural heritage are the prime attractions. Ecotourism is intended to offer tourists insight into the impact of humans on the environment and to promote a greater appreciation of our natural habitats.

Romania provides travellers the opportunity to discover some of the superb, unexplored scenery in Europe. Tourists have the possibility to explore dense pine and beech forests still teeming with wildlife or watch pelicans in the Danube Delta, or they can try their hand at traditional rural crafts, trace secret passages in rambling Transylvanian castles, or just enjoy a tranquil picnic amid a patchwork of wild flowers.

Another attraction for tourists experiencing Romanian Ecotourism is to discover tracks left by wildlife in the forest, watch bears from a hide or experience the co-existence between humans and wildlife by visiting a shepherd's camp.

The Romanian definition of ecotourism has been adopted by the Association of Ecotourism in Romania (AER) following the dedicated definition, issued by the World Tourism Organization. According to AER, ecotourism is a form of tourism where the main motivation of the tourist is to observe and enjoy nature and local customs regarding nature, which must fulfill the following conditions:

- Conservation and protection of the natural environment;
- Educational feature, respect for nature raising awareness among tourists and local communities;
- Use of local human resources;

- Minimum negative impact on the natural and socio-cultural environment (https://www.eco-romania.ro/en/about-ecotourism/).

Ecotourism and its principles (Box 1) are promoted by the AER and are based on two international models:

- Nature and Ecotourism Accreditation Program, developed by the Australian Ecotourism Association and
- *Nature's Best*, the accreditation system promoted by the *Swedish Ecotourism Association*.

These principles must be put into practice both by those who try to develop ecotourism products and by those planning to develop some areas based on ecotourism.

Box	Ì

#### The Romanian ecotourism principles

1. Focus on natural areas
Ecotourism crystallizes around the direct and personal experience in the middle of nature, it takes place in nature and is based on its usage, respectively on harvesting its geomorphologic, biologic, physical, and cultural features
2. Interpretation of the ecotourism product
The ecotourism products appeal to those tourists who wish to interact with the natural environment and, to various degrees, wish to broaden their knowledge, understanding, consideration and enjoyment
3. Environmental sustainability
The ecotourism activities, as well as their planning, must provide the best tourism and planning practices in natural environment conservation and sustainable development activities
4. Ecotourism assists in the preservation of nature
Ecotourism entails involvement in the preservation of the visited natural areas, providing constructive alternatives for the proper management and preservation of these natural areas (e.g. offering financial aid for the restoration of natural areas, gathering the waste left behind by tourists, or contributing to nature preservation organizations)
5. Ecotourism as constructive input in the development of local communities
The local benefits can come from using local guides, buying local goods and services, and using the local amenities; must also highlight the cultural component of the visited area and provide input in its preservation
6. Ecotourism raises tourists' degree of satisfaction
One thing to consider when developing ecotourism products is that, usually, the potential tourists in this area are highly educated and have higher expectations; so, the degree of satisfaction regarding the ecotourism product is essential, and the experience provided must fulfil or even exceed tourists' expectations
7. Adequate marketing
Ecotourism marketing provides customers with extensive and adequate information, all adding up to the increase of their consideration for the natural environment and the visited areas, as well as to a higher degree of satisfaction among tourists.

Source: https://www.eco-romania.ro/en/about-ecotourism/

The AER platform promotes tours that have a valid *Eco-Romania Certificate*, or which are members of this association. The tourism activities developed under the aegis of ecotourism offer the tourism industry, tourists, authorities and local people the possibility to cooperate for the organization and development of responsible journeys into the natural areas unaltered by the anthropic activity, in order to admire the ecological richness, to study, understand and enjoy both nature and cultural diversity, in a manner that will take into account the impact upon the environment, in the idea of maintaining the viability in the respective area for an indefinite period of time. (Nistoreanu, 2006)

The Certification System in Ecotourism is enforced depending on two categories: ecotourism programs offered by tour-operators or tourist guides (maximum 15 participants) and small guesthouses located in rural and natural areas (maximum 25 rooms). A key element of the certification procedure is represented by drawing up a sustained management plan that should respond to all certification requirements. As far as guesthouses are concerned, the Certification System in Ecotourism involves the fulfilling of general principles and meeting the criteria that are checked and scored on site.

#### **3. MATERIAL AND METHOD**

This paper contains an analysis and synthesis of the information on the natural potential of ecotourism in Dobrudgea's countryside, as well as a set of proposals to orient the efforts for putting into value these destinations through ecotourism activities, as an opportunity for sustainable rural development. The study area is focused on the main ecotourism destination: the Danube Delta Biosphere Reserve and the Măcin Mountains National Park in Tulcea county.

The analysis regarding the main modalities to promote and stimulate the efforts of putting into value these destinations through ecotourism activities, as an opportunity for sustainable rural development, has the following information sources: studies and articles published in specialized journals, governmental documents, as well as other development strategies related to ecotourism and sustainable rural development and implemented in Romania. The research method used is the diagnosis-analysis of information, available for the promotion and stimulation of ecotourism activities in the period 2000–2021.

The analysis regarding the development of ecotourism activities within and around the natural protected areas in Dobrudgea is based on the time series represented graphically in their dynamics for all the studied indicators. The data were provided by the National Institute of Statistics, Tempo-online database for the period 2000–2020. The main specific indicators taken into consideration to characterize Dobrudgea's ecotourism have related to the accommodation capacity or offer and the accommodation demand.

#### 4. RESULTS AND DISCUSSIONS

In the south-eastern part of Romania, between the Black Sea to the east, the Danube to the west and north, and the border with Bulgaria to the south, Dobrudgea's territory is a historical province with a history of more than two thousand years and a geographic space with a great variety of landscape inhabited by people belonging to several ethnicities (Figure 1).



Source: http://www.infotravelromania.ro/harta-romania.html. Figure 1. Dobrudgea's position on Romania's historical provinces map

Dobrudgea is traditionally known as a destination for summer tourism and balneary tourism on the Romanian Black Sea shore. But this region also represents an important area from bio-geographic point of view, with valuable ecosystems in scientific reserves, natural reserves, national parks and natural parks; the economic impact produced by the ecotourism programs has obviously increased in preserving nature, educating visitors and supporting sustainable development projects.

In Dobrudgea, the main area with ecotourism activity promoted by the Romanian Association of Ecotourism is the *Danube Delta Biosphere Reserve*, one of Europe's youngest lands; this has a triple international status: Biosphere Reserve, RAMSAR site (wetland of international importance) and World Natural and Cultural Heritage Site (https://ddbra.ro/).

The Danube Delta Biosphere Reserve is the world's third highest biodiversity area and covers an area of approximately 580,000 hectares; it is located in the eastern part of Romania, at the junction of the Danube River with the Black Sea, marking the exit point of the Danube into the sea; it comprises the Danube Delta, the Razim-Sinoe Lakes Complex, the Danube Floodplain upstream of Tulcea from Cotul Pisicii (a meander of the river about 20 m deep, located downstream of Galati, near Grindu) to Parcheş-Somova area, Sărături-Murighiol Lake area and the Black Sea coastal waters up to 20 meter isobaths (Figure 2).



*Source* : http://www.mdrap.ro/userfiles/delta\_dunarii/draft\_Danube\_Delta\_Strategy.pdf Figure 2. Danube Delta Biosphere Reserve limits

The Danube Delta Biosphere Reserve area covers 2.5% of Romania's area, with 87.73% under the administration of Tulcea County, 12.23% under Constanta County, and 0.14% under Galati County; it is the largest protected area in Romania, with a triple international status at present: Biosphere Nature Reserve since 1990, Ramsar site (wet area of international importance) and site of the Natural and Cultural world patrimony. The geographic position of the Reserve is defined by the following geographic coordinates: 28°10'50" (Cotul Pisicii) and 29°42'45" (Sulina) eastern longitude; 45°27' (Chilia branch, km 43) and 44°20'40" (Cape Midia) north latitude (Honţuş, 2015).

The Reserve's territory is a flat region (alluvial plain in formation) with a small slope from the west to the east (0,006%) of which rise the Chiliei plain, a witness for erosion from the Bugeacului Plain (south of Basarabia), the Stipoc continental spit and

the Letea and Caraorman marine spits. With 20.5% of its territory under the sea level and an average altitude of +0,52m, the Danube Delta forms the lowest country relief.

From the environmental point of view, there are four types of areas:

- Strictly protected areas with 20 sites covering 50,904 hectares in total (8.7% of the Reserve's surface); the protection is mandatory and these areas have an exceptional value from a scientific, historical and aesthetical point of view, representative for the natural, terrestrial and aquatic ecosystems in the Reserve;
- Buffer areas established around the strictly protected sites, covering 222,996 hectares (38.5% of the Reserve's area), designated to reduce the human activities impact on these sites;
- Economic zones, covering 306,100 hectares (52.8% of the Reserve's surface) include easily flooded areas, protected fishing, agricultural and forest areas, as well as the localities;
- Areas for ecological restoration where the Danube Delta Biosphere Reserve Authority has projects and activities for ecological restoration and reconstruction, using appropriate technical means and technologies.

The Danube Delta Biosphere Reserve is mainly rural, with dispersed communes. In the neighboring area, the localities are connected via the local road network, while in the Core Delta (the Delta between Chilia and Sfântu Gheorghe branches/channels) they are mostly connected by waterways. The Core Delta consists of the following 8 localities: Ceatalchioi, Pardina, Chilia Veche, C.A. Rosetti, Sfântu Gheorghe, Crişan, Maliuc and Sulina; the communes have only 500–2,000 inhabitants, usually consisting of 2–4 villages. The local population has depended on small-scale, low-intensity use of natural resources, fairly well integrated with the natural heritage: fishing, hunting, cattle grazing, subsistence farming and beekeeping, and viticulture supplemented by outside incomes. Most of the younger generation has left the Delta and old fishing villages of reed huts have been replaced by concrete buildings, although individual fishing huts are retained.

The ethnic structure of the Danube Delta is highly diversified, like the entire historical area of the larger Dobrogea region, and the delta may be an example of ethnic cohesion. Together with the Romanians, who represent the majority, the other nationalities (Macedo-Romanians, Turks, Tatars, Rroma people, Lipovans, Hungarians and other nationalities) are living in harmony. As a result, the religious structure includes: Orthodox, Muslims, Roman Catholics, Old-Rite Christians, Pentecostals, Adventists, other religions. Thus, the Danube Delta is the most multicultural unit in Romania.

The main economic sectors in the Danube Delta are trade, tourism, agriculture, fishing and aquaculture. Tourism has been identified as the main engine for the conservation process and environmental protection for sustainable economic development. In order to promote the Danube Delta Biosphere Reserve, eight major areas covering the Danube Delta were identified in the *Strategic Plan for Sustainable Tourism Development in the Danube Delta 2009–2013*; the criteria were based on two important factors, namely: the existing condition of tourism and leisure in the

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areas addressed, and the main natural/cultural elements underpinning the quality of experience that each area can offer. The identified areas are Tulcea, Chilia, Letea, Crişan, Sulina-Sfântu Gheorghe, Murighiol, Jurilovca, and Corbu (Figure 3).



Source: https://www.interreg-danube.eu/

Figure 3. Recreation and tourism areas in the Danube Delta Biosphere Reserve

Considering the specific character of each area (Table 1), the main objectives of the strategy are:

- preserving and protecting the biodiversity of natural habitats;
- preserving the cultural heritage;
- economic development of local communities in the Danube Delta territory with the involvement of local communities;
- tourism management in the Danube Delta territory.

#### Table 1

Brief description of the recreation and tourism areas in the Danube Delta Biosphere Reserve

Current state and visiting experience	Vision and objectives						
1. Tulcea Area							
It is currently used mainly as an entry gate, spending very little time in the town, maybe less than a day, offering very little information to tourists on the local attractions.	It should provide a complementary experience to tourists who come to visit the Danube Delta, promoting the city and the surrounding area.						
2. Chilia Area							
Currently fishing and hunting are the main attractions for the Romanian tourists who come to this area, apart from the church and the wicker workshop not offering much else	This area should be dedicated to understanding the land part of the Delta, and position itself as a border town with Ukraine.						
3. Letea Area							
It is usually visited for a day trip to the famous oak woods within the sand dunes.	Longer packages should be promoted focusing on the cultural/gastronomic experience and the unique landscape.						
4. Crișan Area							
International and local tourists who are looking for a natural experience, bird watching and fishing.	The area should become the first-class destination for a slow nature related experience.						
5. Sfântu Gheorghe – St	ılina Area						
Sfântu Gheorghe is associated with three main experiences, namely summer beach, an authentic fisherman's village and the <i>Anonimul</i> film festival, and Sulina is mainly a beach destination and known for its cultural richness	It should be a different beach destination at the joining of the old river with the sea, combining nature, history and tradition, with a strong emphasis on cultural attractions						
6. Murighiol Ar	ea						
It offers two different visiting experiences: - an entrance gate for a big number of tourists, who travel in small groups and mostly for the weekend and their main activity is fishing using their own boats or hired boats; - a weekend destination covering Dunavăţul de Jos, Mahmudia and Uzlina, mostly Romanian tourists coming from larger cities.	The area should be a well-managed intensive recreational area (shorter visits), slowing down consumption speed and diversifying the recreational offers to benefit the local people.						
7. Jurilovca Area							
Portița is the main beach destination, Enisala is a major cultural attraction, Razim lake is frequently used by motor boat owners over the weekend damaging the birds' habitats.	An area where to explore the Danube Delta by earth, offering activities for two seasons, summer and winter.						
8. Vadu – Corbu Area							
It is functioning as an informal camping site and it lacks vision and future planning, endangering the natural habitat of the coastal area.	It could become a destination for camping in nature, with many benefits for the local population.						

Source: https://www.interreg-danube.eu/

In this area, *ecotourism activities* can include:

- types of adventure activities (e.g. rafting, canoeing, horse riding tourism on pre-established routes, bicycle trips on established routes, etc.);
- guided trips / organized journeys;
- tours for nature observation (flora, fauna);
- experimentation trips for nature preservation activities;
- trips to local communities (visits to cultural objectives, visiting traditional farms, viewing traditional cultural manifestations, consumption of traditional food products, acquisition of non-food traditional products, etc.).
- The most attractive destinations for the Danube Delta Biosphere Reserve are:
- The beaches: Sfântu Gheorghe beach, Sulina beach, Gura Portiței beach;
- The archaeological citadels and sites: Enisala medieval fortress, Orgame-Argamum archaeological site, Halmyris archaeological site, Salsovia-Mahmudia citadel, Proslavița citadel, Istria citadel;
- The horseback riding services within the accommodation units where this activity can be practiced: Egreta hotel in Dunavăţu de Jos; Green Village Resort in Sfântu Gheorghe; Cormoran Complex in Uzlina;
- The other attractions: the Danube Delta eco-tourist museum centre together with other two museums, the Muslim Mosque and other buildings-patrimony is part of the cultural center of Tulcea town; the spa centre in Morena boarding house in Murighiol; the Niculițel paleo-Christian monument; the herds of wild horses in Letea village.

*The tourism infrastructure* is relatively well represented in the Danube Delta Biosphere Reserve. Therefore, it can be stated that almost all kind of tourism infrastructure is found in Danube Delta: accommodation establishments (hotels, motels, tourist inns, villas, bungalows, tourist campsites, accommodation on ships, rural guesthouses and urban guesthouses); food and beverage facilities; means of tourist transport; leisure services, travel agencies and tourist information centres. It is important to mention that according to the Romanian accommodation ranking system, most bed-places in the Danube Delta are 3-star rated (52.9%) and 4 star-rated (34.3%). This rooms are fully equipped with minibar and air conditioning. The menu includes traditional fish, meat or vegetable dishes, according to the guests' taste.

According to the Romanian tourism statistical data, in the Danube Delta (Tulcea municipality included), the total number of the accommodation units increased from 76 units in 2000 to 272 units in 2020; the existing tourism accommodation capacity increased from 2485 beds in 2000 to 7593 beds in 2020; the accommodation capacity in use fluctuated from year to year; the flows of tourists have a deep influence on the net use of the accommodation capacity indices (calculated by relating the number of overnight stays to the tourism accommodation capacity in use in a certain period) and tourist receivals (Table 2).

The analysis of tourist flow in the period 2000–2020 has proved that the Danube Delta Biosphere Reserve has become increasingly attractive as an

ecotourism destination both for residents and non-residents; it is generally visited by middle-aged tourists with above average incomes, arriving here for week-ends or for a few days stays; Romanian tourists dominate this market (Figure 4).

In the Danube Delta Biosphere Reserve most foreign tourists came from Germany (29.8%), followed at great distance by Spain (9.8%), Italy (7.9%), France (7.5%) and Norway (7.2%). Other countries generating tourists for the Danube Delta were Poland, Austria, United Kingdom etc. (https://www.interreg-danube.eu/).

in the period 2000–2020									
Years	Structures number	Tourism accommodation capacity		Tourism accommodation activity					
		existing no. places	in use no. places-days	arrivals no.	nights no.	net use index	average length of stay		
2000	76	2485	426658	34462	84816	19.9	2.5		
2001	77	248	476815	45800	97454	20.4	2.2		
2002	78	2258	420119	35612	78193	18.6	2.2		
2003	98	2801	332963	36985	74533	22.4	2.0		
2004	121	3180	455024	72592	128759	28.3	1.8		
2005	122	3806	532763	76961	151162	28.4	2.0		
2006	144	4086	549171	54624	139798	25.5	2.6		
2007	101	3266	548880	73767	145978	26.6	2.0		
2008	103	3761	554298	96090	174355	31.5	1.8		
2009	141	4988	542696	70479	124341	22.9	1.8		
2010	127	4287	549122	68414	108705	19.8	1.6		
2011	110	3634	566920	81567	130519	23.0	1.6		
2012	136	4767	643545	88021	133797	20.8	1.5		
2013	135	4297	657396	80885	191329	29.1	2.4		
2014	138	4283	570201	65604	125416	22.0	1.9		
2015	133	3907	560259	69076	138177	24.7	2.0		
2016	136	3690	606684	73114	149798	24.7	2.0		
2017	125	3890	674955	100423	210334	31.2	2.1		
2018	286	7645	1126170	165431	371797	33.0	2.2		
2019	254	7205	1160026	166411	380375	32.8	2.3		
2020	272	7593	965225	118325	299766	31.1	2.5		

Evolution of the main indicators of the tourism activity in the *Danube Delta Biosphere Reserve*, in the period 2000–2020

Source: Tempo-online database, 2021, http://www.insse.ro/

The tourism operators see the Danube Delta as Romania's advantage in the tourism competition with the neighbor countries. The number of tourists visiting the Danube Delta has increased significantly in latest years. Thus, the boat trips or the floating hotel, fishing, the study of wild flora and fauna or the meals served in fishermen' villages have increased the attractiveness of these areas. However, it is considered that the tourism potential of the Delta is not fully used.



Figure 4. Number of tourist arrivals in the Danube Delta Biosphere Reserve

The *Macinului Mountains National Park* represents another special attraction point for the tourists who prefer ecotourism, due to the special values of the area: various landscapes, special biodiversity, with species protected by law, which are declared natural monuments, the oldest territory in Romania and one of the oldest territories in Europe. Seen from the Danube River, they appear as only low hills. However, they are a mountainous region located between the Danube River to the north and west, Taita River and *Culmea Niculitelului* to the east, Babadag Plateau and Casimcea Plateau to the south (Figure 5).



Source: http://www.parcmacin.ro/

Figure 5. Macinului Mountains National Park limits

The Măcin Mountains is the oldest mountain range in Romania, being formed in the second part of the Paleozoic, in the Carboniferous and Permian, during the Hercynian orogeny. The predominant rock is granite. Erosion (caused by the difference of temperature) has created steep slopes, with the aspect of ruins. They are divided in *Culmea Măcinului* (the southern part) and *Culmea Pricopanului* (the northern part). The highest peak is *Tuțuiatu* (also called *Greci*), 467 meters high. Other important peaks are Căpuşa Peak (433 m) and the neighbouring area; Moroianu Peak (434 m); Priopcea Peak (410 m); Sulucu Mare Peak (370 m) and Pricopanului Peak; Iacob's Mountain (341 m); the fossil point: Bujoarele Hill; the Forest: Valea Fagilor – a botanical natural reserve; the Salty Lake.

The Măcin Mountains are remarkably important among the country's mountains, being the oldest mountains in Romania, yet this area is less known in ecotourism, although the Danube Delta Biosphere Reserve is nearby, an ecotourism area that has become increasingly attractive as an ecotourism destination both for Romanians and foreign visitors.

Due to the numerous historical vestiges, the researchers' interest is focused on the archaeological excavations and equally on the research of existing vast natural treasure here – geological, botanical and zoological. The available natural potential of Măcin Mountains National Park makes it accessible to a wide range of tourists, interested in hiking, landscapes, local flora and fauna, studies and documentaries (documentations).

The Administration of the Măcin Mountains National Park promotes the scientific importance of natural, historical, cultural, rural and leisure objectives so that tourists who are fond of ecotourism can have a general view of this land full of beauty, spirituality and history, so as to discover enough reasons to return to this region. It also proposes touristic facilities and services inspired by local resources; it supports the economic development of the park's neighboring areas; calls for respect for the natural environment and historical legacy; participates in projecting an image of ecological responsibility among the guests of the park.

In the Măcin Mountains National Park there are 6 marked trails, a "Măcin Stories" theme trail, a trail for equestrian tourism and cycling tourism trails.

According to the data of the National Institute for Research and Development in Tourism (NIRDT) from Bucharest, most visitors in the Măcin Mountains National Park are Romanians coming from the areas in the vicinity of the Park (from the local communities or from Brăila, Galați, Tulcea and Constanța municipalities), with an average duration of stay of one day (and a minimum economic impact upon the local communities); the main visitor groups are local people from the localities near the park (for a picnic), bird-watchers, rovers in small groups (2–10 persons), organized groups of 20–40 persons who ask for a guide from the park administration, cycling tourists, climbers, families with caravans and personal cars.

The Central Dobrudgean Plateau is the keeper of one of the oldest geologic formations in Europe with limestones dating to the Mesozoic era – *Dobrogea Gorges*. Former coral reefs of the Thetis Sea, remains of atolls, the gorges are located on the right slope of Casimcea valley, on 285 ha, the fossil species from the limestone walls being unique in Romania and perfectly preserved. In this miniature canyon, declared a natural reserve, where climbing is forbidden, there are two important caves from palaeontological point of view: *La Adam* Cave and *Gura Dobrogei* Cave.



Source: http://locuridinromania.ro/judetul-constanta Figure 6. Dobrogea Gorges in the Central Dobrudgean Plateau

In the Southern Dobrudgean Plateau there is another point with special value for people interested in speleology, but also for people who love history and mystery - the *Limanu Cave*. Until now, altars, sculptures and rupestrian paintings have been discovered, as well as ceramic vessels dating from the Geto-Dacian population flourishing times. With many ramifications and the winding galleries, the cave looks like a true labyrinth difficult to penetrate, so that it is impossible to discover all its secrets. Included in the Natura 2000 Site, Limanu Cave is one of the three habitats in Romania for horseshoe bats – Rhinolophus Mehelyi. The species decreased from over 5,000 specimens to about 300 individuals. The ecologists warned on the vulnerability of the cave, which is a magnet for treasure hunters. Through their actions they tend to destroy the fauna.

The *forests* area situated between the Danube and the Black Sea are also included on the lists of *Natura 2000* as Special Protection Areas (SPA) and Sites of Community Interest (SCI). The studies and articles published in specialized journals have shown that these forests are significant for their large number of

threatened or rare plant species and restricted plant communities including significant areas of old growth forest (with ages between 120–160 years). Most of these belong to the forest district Ciucurova, Cerna, Babadag and Băneasa. The main species that are found in old stands are: brown oak (Quercus pedunculiflora K. Koch), pedunculate oak (Quercus robur L.) and linden (Tilia cordata Mill.). These species have annual fructifications which ensure their natural regeneration.

# **5. CONCLUSIONS**

Dobrudgea is one of the richest yet overlooked regions of Romania. The Danube Delta is the most well-known place from Dobrudgea. Dobrudgea also represents an important zone, with valuable ecosystems in scientific reserves, natural reserves, national parks, natural parks, and the economic impact produced by ecotourism programs has obviously increased.

The main reasons for the development of ecotourism are: increasing the time for recreation; increasing interest in maintaining health; the authenticity and naturalness of life in the country; peace and comfort.

Summing up the main characteristics of ecotourism activity in Dobrogea, in the period 2000–2020, we can draw the following conclusions:

- the ecotourism offer is growing;
- the quality of accommodation establishments, food and beverage facilities, leisure services, travel agencies and tourist information has steadily improved after Romania's accession to the European Union;
- the Danube Delta is known worldwide for its unique character, which combines nature (colonies of birds, lush forests, sandy banks), recreational uses (fishing, beach season) and ethno-cultural elements (folk architecture, customs and specific traditions);
- the number of tourist arrivals in the Danube Delta Biosphere Reserve has registered a general increasing trend because the Danube Delta has become an increasingly attractive destination for foreign tourists;
- the share of foreign tourists' arrivals in total tourists' arrivals in the Danube Delta Biosphere Reserve has remained constant in the analyzed period.;
- a multitude of factors are involved in ecotourism development, some of them playing a more important role than the others, but each of them brings its special contribution to ecotourism development;
- in the present economic conditions, most tourists (even the wealthy ones), are concerned about the price of tourism services;
- tourists began to pay great attention to their expenditures, the prices of tourism services being the main variable in consumers' choices.
- in most protected areas in Dobrudgea, networks of tourist routes were created, most of them being certified or going to be certified;

- most routes are for camping, but cycling routes or water routes were also established (in the parks located on wetland areas);
- the variation registered by ecotourism activity is explained by tourists' desire who are planning holiday mainly in the middle of the year, with an average duration of stay of one day, limited by the money allocated for spending the vacation, in close relation to the family budget. In this way, the managers of ecotourism cannot cover the whole capacity of the accommodation establishments.

Therefore, the ecotourism potential in Dobrogea should be much better exploited, the demand/offer ratio should be in balance, the scientific reserves, natural reserves, national parks and natural parks as an ecotourism destination should be more intensively promoted and service quality should be improved in order to increase the ecotourism flow and attractiveness of this region.

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