THE TOURISM CAPITALIZATION OF THE HYDROGRAPHIC POTENTIAL IN "MARAMUREŞ LAND" DEPRESSION AREA BY MEANS OF RURAL TOURISM

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ABSTRACT. – The Tourism Capitalization of the Hydrographic Potential in "Maramureş Land" Depression Area by Means of Rural Tourism. The rural tourism of Maramureş is a complex activity, with multiple facets. It is not exclusively based on the peasant household, but also on holidays in the middle of nature, motivated by different activities that take place due to a rich natural potential. Out of this attractive natural potential, the hydrographic component was chosen to be analyzed, as it is an important resource, which determined the emergence, development and diversification of tourism in Maramureş Land. This study intends to present the tourism value and importance of the hydrographic resources of Maramureş Land, by means of which rural tourism can be diversified in this geographical area. The hydrography is the main factor influencing the modification of the Maramureş geographic space, the development and characteristics of the settlements, the economic activities performed by the local population. It is also the main factor in directing and orienting the transport network. Maramureş Land hydrographic network has a high variety, from fresh water, to salt water, from rivers with high flows to mineral water springs, being used in diverse manners.

Keywords: Maramureş Land, hydrographic resources, tourism capitalization, rural tourism, sport tourism.

1. INTRODUCTION

Rural areas are the framework for a range of tourism activities, specific for many forms of tourism. The built up area of the village with anthropogenic tourism resources is best suited for cultural, religious, recreational and partially for curative tourism. The village surroundings, which encompasses mostly a natural environment, is suited for sport and adventure, recreational, scientific and curative tourism, hunting, caving etc. One can therefore say that rural tourism greatly mingles with other forms of tourism, stimulating and completing each other.

The hydrography of Maramureş Land, through its morphometric characteristics, has an important role to play in the orientation of geographic phenomena. The rivers act as communication and connection lines (the road network can be seen along these rivers), which guide the energy flows and put a distinctive mark on human habitats

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and activities. The underground and surface hydrographic resources of Maramures Land are an important tourism resource, from a scenic point of view, as well as for recreational and spa treatment purposes.

The river network, with its high density and considerable discharges, is the main factor influencing the mass and energy exchanges between the extreme limits of the Maramureş geographical space. The hydrographic network of Maramureş Land is tributary to Tisa. It is represented by the main collecting rivers Vişeu and Iza, with their tributaries. From the tourism perspective, they are important for sport tourism on some segments, more exactly for canoeing and white water rafting. Alongside the capitalization through active sport activities, the rivers can also be used for sporting activities that require less physical effort, such as fishing.

2. METHODOLOGY OF THE RESEARCH

Starting from the specialized references, which are extensive in the case of rural tourism, and adding the territorial and cartographic analysis, we proposed several possible methods of tourism capitalization for the hydrographic components by means of rural tourism. The cartographic material is intended to complete the written information and to establish a first visual territorial contact of the locations where one can engage in sporting activities, by capitalizing the hydrographic resources. The results obtained in this research, presented below, can act as sources of inspiration for establishing a service offer within the rural tourism of Maramures.

3. THE CAPITALIZATION OF HYDROGRAPHIC COMPONENTS

The components of the Maramureş Depression hydrography can be capitalized by means of rural tourism, more exactly by specific activities of sport (recreation and adventure), scientific and curative tourism.

3. 1. Sport and recreational tourism

Today, we witness a new shift of the tourism market towards sport tourism, and the hydrographic resources of Maramureş space offer the perfect backdrop for a large range of sporting activities.

White water rafting is part of the adventure sport tourism and is increasingly sought after in Romania, as a recreational alternative for adrenaline rush junkies. In Maramureş Land there is no offer of tourism services that includes rafting, but this sport is practiced by amateurs, especially on Vişeu River. The rivers of Maramureş Land that are suitable for rafting are Iza, Vişeu, Vaser, Mara, Tisa and Săpânţa.

The longitudinal section of some parts of the main Maramureş valleys do not require any improvements in order to practice rafting. However, some do need such improvements by deepening the river bed and creating water drops to increase the tourists' thrills. In the case of low flowing rivers, some works can be implemented by constructing small embankments and water accumulations, that can be released in a controlled manner to ensure a water flow that is suitable for rafting. Such an example is the barring of the river channels, as in the case of Iza River, where, along its course, there are places that see the river split into two or more channels, or like Mara, which splits near Sat-Şugatag. On some Maramureş rivers there are problems due to the

widening of the river, but the main concern is the low slope angle of the river which leads to sedimentation, creating islets, especially near confluences. Such an example can be seen on the rivers Mara and Iza, near Vadu Izei. Rafting requires river sectors that have a less smoother and a more turbulent flow.

The length, flow and mineralization of Iza River allow it to be capitalized for fishing and rafting (on its middle course), and for canoeing in the lower course. The course of Iza River does not have many spectacular sectors, even though the discharge allows rafting. Iza has a sector that is quite suitable for rafting between Bârsana and Sighet. Mara River has a high potential for this sport, as it is accesible, without many anthropogenic interventions, on its entire course, from the village of Mara to its confluence with Iza.

Tisa is the best suited for rafting, due to its discharge and the mountain area that the river crosses. However, an obstacle for this sport is the presence of the border which is along this river. A possible course for rafting might start at Valea Vişeului, where Tisa enters the Romanian-Ukrainian border, until Sighet, having a length of 32 km.

The main rivers that are suitable for tourism capitalization in Maramureş Land
Table 1

Crt. no.	The name of the river	The length of the river in the analysed region	The length with the possibility of capitalization
		(km)	(km)
1.	Iza	83	10 rafting; 5 canoe
2.	Vișeu	80	6 rafting
3.	Tisa	63	32 rafting
4.	Vaser	43	6 rafting &canoe
5.	Mara	40	21 rafting &canoe
6.	Săpânța	20	10 canoe, 5 rafting
7.	Ruscova	39	14 rafting &canoe

For Vişeu River, the best sector for rafting is the one between Petrova and the confluence with Tisa, as the river goes through a gorge, and the discharge is higher as it approaches the confluence. Even if it runs through a volcanic region, mineralization is low. This leads to the development of a rich aquatic fauna, with possibilities to capitalize this potential through sport fishing and recreation. Its tributaries, Vaser (43 km) and Ruscova (39 km), are fast-flowing and suitable for rafting. The tributary of Vişeu, Vaser, has a gorge sector, 42 km long, ideal for rafting and canoeing.

As for Săpânța River, its sector suitable for rafting is relatively short, but spectacular due to the gorge formed in a volcanic region. Having a steep slope and an average flow of $3.8~{\rm m}^3/{\rm s}$, the river is appropriate for rafting, with a very rough surface with boulders up to $50\text{-}70~{\rm cm}$ in diameter that have been dislodged and transported from the volcanic range. Along the river, there are smaller drops and also larger drops where waterfalls are formed, with suitable heights for wet climbing, and ice climbing in winter. At the confluence, the slope is low, creating a marshland favourable for lakes that can shelter species of golden and rainbow trout for fishing. The highly oxygenated river water (9.5-12 mg/l), with a pH that varies between 4.5-9, is rich in rainbow trout, with possibilities for sport and relaxation fishing.

On the river sectors that fulfil the conditions for sports like rafting and canoeing, further activities can be added such as mock naval battle or retrieving objects from the water. Rafting can be classified as an open air recreational activity or a team sport where movement coordination is crucial. The practice period depends on the water level, the best months being April, May, the start of June or autumn, if precipitation is adequate. The months of July and August are also suitable for this sport, if the water level is high enough.

Another sport with a capitalization potential in Maramureş Land is canyoning, which involves going through a rough sector (rocks, jumps, steep valleys, waterfalls, basins) with a large difference in height, carved into the rock by water. The complex mountain topography, due to genetic and modelling factors, offers the possibility for canyoning in many places in the mountains of Maramureş Land (Covătari Waterfall, Pişătoarea Waterfall). Runcu Valley is one of the best suited for canyoning, with a lot of rapids, sometimes on rock walls.

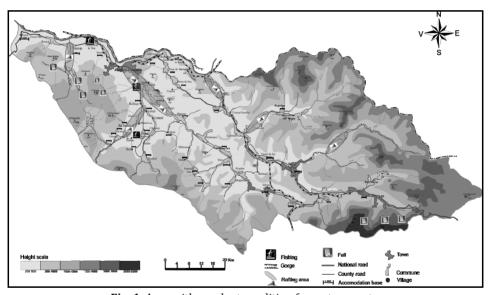


Fig. 1. Area with excelent condition for water sports.

The waterfalls contribute to the landscape spectacularity in Maramureş Land. Waterfalls like Cailor (Borşa), Strungi (Sighet), Covătari, Runcu and Şipot (Săpânţa), are extremely important for the development of sport tourism through wet climbing and ice climbing in winter.

In addition to water sports, the hydrographic potential can be further capitalized by ensuring the recreation of the regional urban population through picnic tourism. Unfortunately, we notice a lack of facilities and / or the deplorable state of lakes and rivers, which makes them unattractive for recreation, being mostly exploited from a scenic point of view. The number of lakes that have recreational equipment, like hydrobicycles and boats, is reduced. This kind of equipment is found only in one area – Găvrilă Lake (Ocna Şugatag). This lake also has a small strip of beach, unlike other lakes in the county.

3. 2. Scientific tourism

The hydrographic network includes lakes, ponds, marshlands, oligotrophic swamps that contain a valuable biodiversity both for science and tourism. The wet areas change their size during the year, some even disappear during summer, reappearing after rains or due to snow melting.

The oligotrophic marshes from Maramureş are the most representative in Romania. The peat found here is of high scientific value, being an "archive" for past and present biodiversity. This can form the basis for inferences regarding the evolution of climate and vegetation.

This form of tourism is in an incipient stage, being performed only by dedicated biologists, but can form a perfect material for consolidating the students' knowledge during open biology and geography classes, coordinated by their teachers. Moreover, they can lead to research studies for bachelor students, during laboratory classes, and also for publications.

The multitude of marshlands and the general lack of interest in knowing them, with the exception of researchers and dedicated persons, often leads to their omission from maps.

The lakes that exist in the depression area of Maramureş are mostly manmade, being divided into two categories: salt water (Ocna Şugatag) and fresh water (Câmpulung la Tisa, Petrova, Sighet). Most lakes are used for recreation and fishing, but there are a series of small lakes used for aquafarming, mainly for trout (Săpânţa, Călineşti, Ieud, Piatra, Mara, Deseşti).

3. 3. Curative tourism

From all the natural resources of Maramureş Land, salt was the most important one for the historical and social-political evolution of the area. The existence of salt deposits in the region is due to the paleogeographical evolution of the territory during the Quaternary Period. The most important salt deposits in Maramureş Land, capitalized at present, can be found at Ocna Şugatag and Coştiui. The collapse of the old salt mines led to the creation of salt lakes, mainly capitalized on a regional level. Other rich deposits, identifiable due to mineral water springs, can be found in the area of Slătioara, Botiza, Bogdan Vodă, Ieud, Săliștea de Sus, Rona de Jos. The salt waters are used for health and spa tourism in Ocna Şugatag and Coştiui. In other places, the waters are used within the households, for food preservation.

The mineral water springs found in the region enhance the hydrographic richness. Many mineral springs are suitable for spa usage due to their flow and chemical characteristics, but their present day usage is limited to the local level. The existence of such springs with a considerable sulphur content is due to the old volcanic phenomena that took place in this region. The sulphurous springs are plentiful, and can be found in: Vadul Izei, Oncești, Bârsana, Botiza, Poienile Izei, Bogdan Vodă, Ieud, Săliștea de Sus, Săpânța, Borșa, Crăciunești, Breb, Câmpulung la Tisa, Crasna, etc (fig. 2).

The presence of chemically varied hydromineral deposits of curative importance contributed to the emergence of tourism in this area. However, over time, they were abandoned, and today they are used by locals who know, from experience, the benefits of these waters. The usage of mineral waters for treatment and cure started a long time ago in Maramureş County, in spa type settlements. The most famous spas were Săpânţa, Breb,

Văleni-Feredeaua, Ieud, Crasna, Şugău-Feredeaua (fig. 3). One can still find facilities for balneotherapy in some settlements with a long standing tradition, old spas, that, unfortunately, no longer cope with the times, being left in a state of decay and abandonment (Poienile de sub Munte, Dragomirești, Crăciunești). The last few years saw some attempts to revitalize some of the settlements formerly used as spas, by building facilities and capitalizing the waters at a local level (for now), and less through tourism, but with promising perspectives for their reintroduction in the tourism circuit (Botiza, Câmpulung la Tisa).

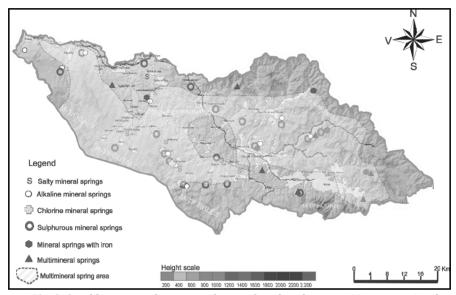


Fig. 2. Sparkling mineral water tipology and its distribution in Maramures Land

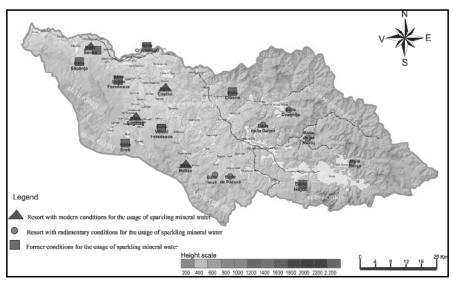


Fig. 3. Facilities for the usage of mineral waters

The richness of curative natural resources found in Maramureş offers many and diverse capitalization posibilities, but for now the facilities for balneotherapy are lacking, some do not meet the standards, while some are not used at all.

4. CONCLUSIONS

The hydrography of Maramureş Land includes numerous resources, many left unused, which form the basis for the territorial planning regarding curative and recreational tourism, with possibilities for a sustainable development of rural tourism in Maramures.

Groundwater, through its characteristics, microclimate and scenic beauty, leads to the construction of secondary residences and tourism facilities for sleeping, dining, recreation. It usually takes a lot of time to make these areas suitable for tourism, due to financial or bureacratic reasons, that is why suiting the lakes and rivers and their adjacent areas for tourism services is poor within the analyzed region, but the perspectives are promising. The most numerous initiatives regarding the arrangement of hydrographic components (lakes) are those that involve small trout fisheries, mainly used for fish trading and less for recreational and sport activities. The exception is Meghery Lake (Câmpulung la Tisa), that is meant for sport and relaxation fishing.

Other lakes within the depression area of Maramureş Land are the ones at Ocna-Şugatag, which, besides their scenic function, are used for recreational tourism, and then for curative and sport tourism.

The existence of a surface covered by flowing or stationary water changes the scenery, making it more attractive.

Adventure sport tourism is a continuously growing market, with many posibilities for capitalization within the presented area due to its hydrographic richness. The rich and diverse hydrographic network, with great potential for boosting rural tourism, is not capitalized as it should be.

Another way to capitalize hydrography through tourism is creating old peasant type instalations (mills, whirlpools), that can use the river energy for power, thus also capitalizing the cultural tourism of the area.

The existing lakes are insufficiently fit for recreational purposes. The diversity of hydrographic components has a good frame for sustaining tourism activities even without large construction projects, only with minimum effort.

The attractiveness of present day rural tourism can suffer if the provided services are not diversified. The hydrography of Maramureş Land represents an important capitalization potential for rural tourism, through recreational activities.

The development strategies for rural areas must take into account the inexhaustible natural resources, such as rivers. Most settlements are situated along rivers, that can contribute to the economic and territorial development of these places through different forms of tourism, but only after their proper planning. The curative tourism of Maramureş Land is centred on the existing spas, but also on the development of other tourism products that can make use of the hydrographic resources. The hydrographic components offer an opportunity for the diversification of tourism activities within the region.

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