

## THE CORRELATION BETWEEN ALMAJULUI VALLEY WATER MILLS AND TOURISM DEVELOPMENT

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**Abstract:** *Valea Almajului started to be known as a tourist destination due to the water mills from Rudaria. Although the entire area is studded with water mills, only Rudaria managed to become a nationally known destination. The purpose of this article is to identify the correlations between the existence of water mills, tourism promotion, and the development of HoReCa businesses in the area. In the article the authors used the method of documentary analysis, structuring the information obtained from the bibliography at the end of the paper. Following the research, it was confirmed that the tourist development of the Valea Almajului area depends on the existence of water mills correlated with tourism promotion.*

**Key words:** *tourism, development, Valea Almajului, water mills*

### INTRODUCTION

Romania has areas where ecotourism activities can be carried out. Most of these areas are not known to tourists and their tourist potential is not valued.

The Almajului Valley is an exclusively rural intra-montane area, well vascularised by the rivers and streams that descend from the mountain slopes on their way to the Nera River. Human communities developed around each river, with a village or a hamlet developing on each tributary. Water mills appeared as a natural necessity for man to be able to feed himself more easily. Using simple technology, using the power of water, the strength of stones and the versatility of wood, the man-built water mills. The main purpose was to grind the grains.

The water mill was an ancient installation of Latin origin that found on favourable Daco-Roman territory the conditions for function. This was possible by the Roman conquest of Dacia and because the Danubian Carpathian relief pontic allowed the success of this technical installation.

A Roman invention that once again proves romanization and continuity of the Daco-Roman population, the ancestor of the Romanian people. [12]

What hundreds of years ago was a necessity for the locals is today the basis of the economic development of this area through rural tourism.

### MATERIALS AND METHODS

In their scholarly exposition, the authors meticulously applied the documentary analysis method, a rigorous approach that involved systematically organizing and meticulously scrutinizing the wealth of information culled from the bibliography provided at the conclusion of the article.

This methodological precision enabled a thorough and comprehensive exploration of pertinent literature, ensuring that no valuable insights were overlooked. By delving deeply into the referenced works, the authors enriched the study's theoretical framework, grounding their analysis in a solid foundation of existing knowledge and scholarly discourse.

This meticulous examination not only broadened the scope of understanding but also enhanced the depth of analysis, allowing for nuanced insights and a more robust interpretation of the subject matter.

### RESEARCH RESULTS

Caras-Severin County has an area of 851,976 km<sup>2</sup>, which is, in terms of area, one of the largest counties in the country and occupies the third position after Timis County (869,665 km<sup>2</sup>) and Suceava (855,350 km<sup>2</sup>). From a geographical point of view, Caras-Severin County is the 'most mountainous' county in the country, with more than 80% of the surface area included in the mountain area, according to the regulations for the inclusion of territorial administrative units (UAT) in the mountain area. The mountain structure of the county, conferred by mountain massifs, and their mineral wealth have favoured, over time, a complex economic development of mining, metallurgical industry, fruit growing, agropastoral activities, tourism, etc. [5]

Due to the mountain relief and the limited access roads, the Caras-Severin county is divided into several areas. Each area is well defined geographically, socially, and culturally. Therefore, depending on the natural resources that prevailed in certain areas, the life of the inhabitants was developed and adapted. One of these areas, part of the Caras-Severin county, is the Almajului Valley.

The Almaj Valley is an intramontane depression, located in the southern part of the Banat Mountains.

Due to geographical location, Valea Almajului is an exclusive rural settlement, being isolated from urban environments due to distance and access roads. [1]

Through sustainable development is understood the satisfaction of existent tourists' needs, by taking care of the environment and the tourist resources so that they could be useful in the future. [10]

The genesis of our research stems from tracing the evolution of the number of water mills over time. This historical trajectory serves as the foundational cornerstone upon which our investigation is built. By scrutinizing the fluctuations and trends in the proliferation of water mills across time, we aim to unravel the intricate narrative of their development and the broader implications therein. This exploration of historical data not only provides crucial context but also offers invaluable insights into the socioeconomic dynamics and environmental factors shaping the landscape of water mill utilization. Thus, our research embarks on a journey through time, illuminating the multifaceted story of water mill evolution and its significance in various contexts.

#### **1. The situation of Water Mills in the Almajului Valley during the period 1874 – 2023**

The number of water mills has fluctuated over time in the Almajului Valley area of Caraş-Severin County, influenced by the real need that locals have had over time. Each water mill was built to serve a group of families. Each family had a row at the mill so that the grinding time was divided equally.

Based on the data above, we can observe the decline of the rudimentary industry of the village world. Over time, the industry developed and the water mills were replaced by electric ones. While more households had these electric mills, the water mills in the rivers continued to deteriorate.

In addition to the development of the domestic industry, the water mills also suffered great destruction due to natural causes. During the springs, after the snow melted, many mills were destroyed by the waters.

Table 1.

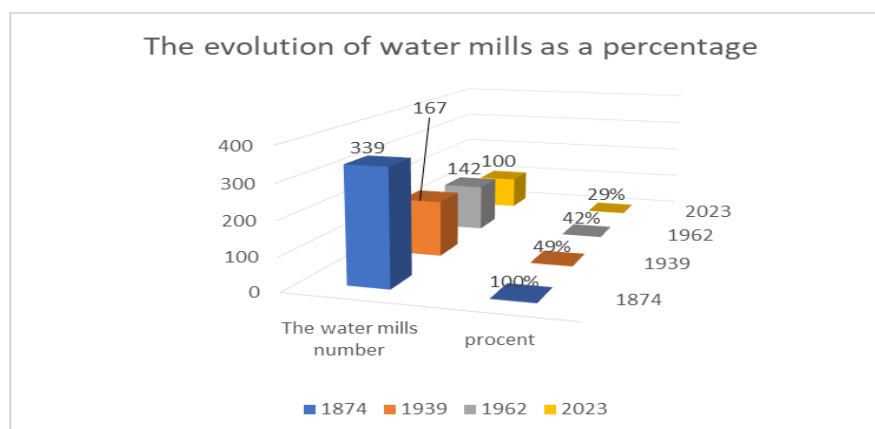
**The situation of water mills in Almajului Valley by location  
during the period 1874 - 2023**

No.	Town	Village	1874	1939	1962	2023
1	Bozovici	Bozovici	27	16	15	4
2		Prilipeț	20	11	6	4
3	Prigor	Prigor	21	12	12	8
4		Borlovenii Noi	7	10	8	3
5		Borlovenii Vechi	11	11	7	4
6	Pătaș	Pătaș	28	10	12	5
7		Putna	14	4	2	3
8	Eftimie Murgu	Eftimie Murgu	51	23	22	22
9	Bania	Bania	13	12	7	8
10		Gârbovăt	17	7	3	0
11	Dalboșet	Dalboșet	22	8	14	6
12		Șopotu Vechi	31	18	12	10
13	Lapușnicu Mare	Lapușnicu Mare	28	14	8	8
14		Mocerîș	23	5	6	4
15	Șopotu Nou	Șopotu Nou	23	6	8	10
16		Ravensca	3	-	-	1
<b>ALL</b>	<b>7</b>	<b>16</b>	<b>339</b>	<b>167</b>	<b>142</b>	<b>100</b>

Source: Radu Trifan, *Morile Banatului*, 2023 [14]

Man could not stand in the way of nature, and only after the waters receded could they see the disasters. Many mills perished in this way, others were lucky and escaped intact, and others were rebuilt, the peasants finding the component parts scattered in the fields.

In areas where the mills stood resilient against the test of time, human intervention played a pivotal role in their preservation and continuity. Through meticulous care, maintenance, and adaptive strategies, communities ensured the longevity of these vital structures. Human ingenuity, coupled with a deep understanding of the mills' mechanics and significance, proved instrumental in overcoming challenges and safeguarding these icons of heritage and industry. Thus, amidst changing landscapes and evolving technologies, the enduring presence of these mills stands as a testament to the enduring bond between humanity and its built environment.

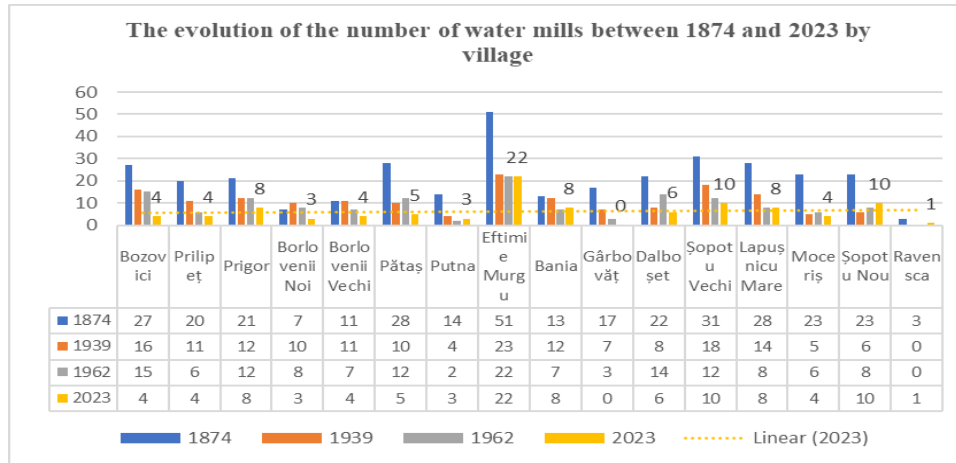


**Figure 1. The evolution of water mills as a percentage**

Source: Radu Trifan, *Developed by the authors based on Morile Banatului*, 2023, [14]

If in 1874 the number of inventoried mills in the area was 339, this number gradually decreased, reaching 100 in 2023. The Almajului Valley lost 71% of the water mills it had a century and a half ago.

Between 1874 and 2023, the number of mills decreased so much because the local people decided not to get involved. He left the mills to the prey of nature and the home industry was left behind because the man preferred to use the advanced technology that came with the electric mill to make his work easier.



**Figure 2. The evolution of the number of water mills between 1874 and 2023 by village**

Source: Radu Trifan, 2023, Developed by the authors based on Morile Banatului, [14]

According to the graph, the evolution of the number of water mills had slight oscillations. In some places, there were situations where the number of water mills increased during the research period. The most obvious oscillations were recorded in Dalboșet and Șopotu Nou.



**Figure 3. The number of existing mills in the year 2023 in each village of the Almăjului Valley area**

Source: Radu Trifan, 2023, Developed by the authors based on Morile Banatului, [14]

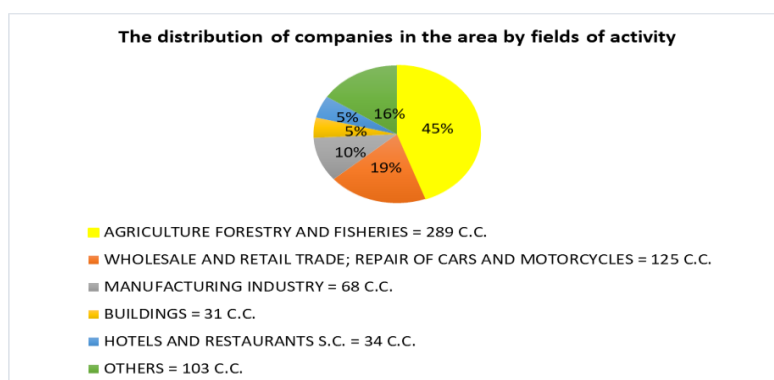
In conclusion, Eftimie Murgu (Rudaria) is the village where the largest number of mills have been preserved and renovated. Eftimie Murgu owns 22% of the millinological heritage of the Almăjului Valley. The Almăjului Valley lost 71% of the mills it had a century and a half ago. [8]

The destination area of the flow of tourists - corresponds to the administrative areas of the seven communes that make up the regional system ara Almăjului (municipalities: Bănia, Bozovici, Dalboșet, Eftimie Murgu, Lăpușnicu Mare, Prigor, and șopotu Nou), the

commune with the largest flow of tourists due to the rich tourism being Rudaria (Eftimie Murgu).[2,3,4,9]

## 2. The economic life of the area

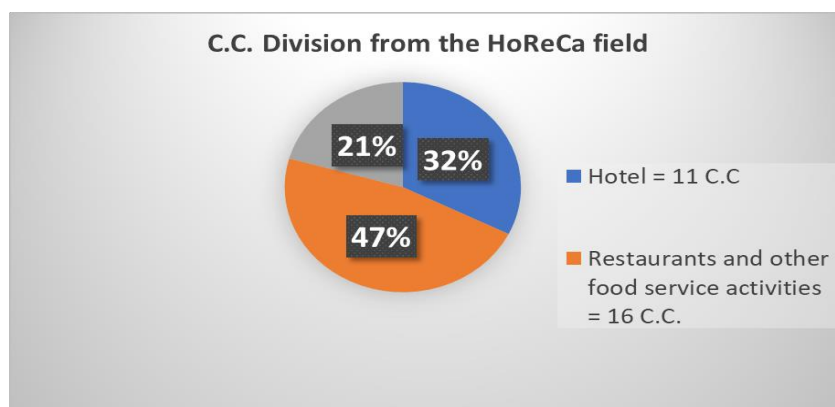
Currently, the economic landscape of Almajului Valley is characterized by the presence of 649 commercial enterprises. The distribution of these companies across various sectors is depicted in the graph below, shedding light on the diverse array of activities shaping the valley's economic fabric. This visual representation offers insights into the sectoral composition of the local economy, providing valuable information for stakeholders and policymakers alike.



**Figure 4. The distribution of companies in the area by fields of activity**

Source: Valorisation of the Almajului Valley through Tourism, Author(s): Busa Nicoleta, 2023 [1]

According to the data, the area is predominantly agricultural. Activities in the category of hotels and restaurants represent only 5% of the total commercial activities conducted here.

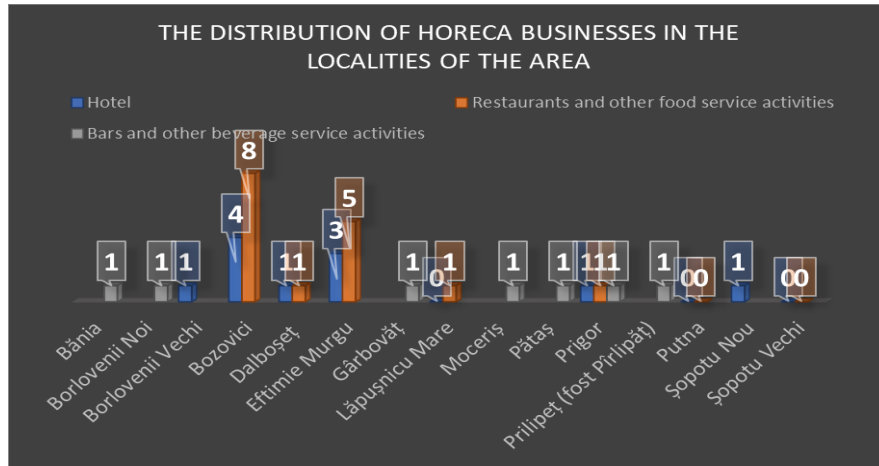


**Figure 5. The division of commercial companies in the field of HoReCa**

Source: Valorisation of the Almajului Valley through Tourism, Author(s): Busa Nicoleta, 2023, [1]

Although the HORECA sector totals 34 commercial companies, only those that operate as accommodation units and restaurants are really directly involved in the tourist life of the area. The bars, 7 in total, are actually communal bars serving the locals.

To elaborate, within this context, there exist 27 businesses that actively contribute to the turnover through tourism-related activities in the area. These enterprises exhibit varying degrees of dependence on tourism for their revenue generation.



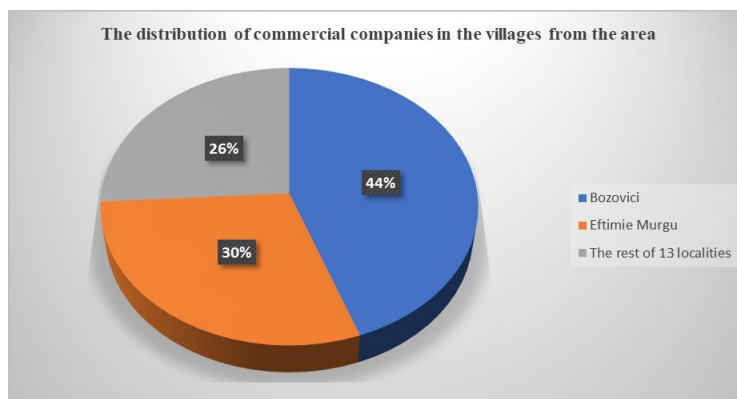
**Figure 6. The distribution of HORECA businesses in the area**

Source: Valorisation of the Almajului Valley through Tourism, Author(s): Busa Nicoleta, 2023, [1]

Consequently, at present, tourism accounts for approximately 4% of the total business activity in Almajului Valley. This statistic underscores the growing significance of tourism as a component of the local economy, albeit within a diverse economic landscape encompassing multiple sectors.

### 3. How tourism has impacted the economic development of the area

The analysis identifies Eftimie Murgu and Bozovici as the key villages with the highest concentration of tourist-centric businesses within the Almajului Valley. Eftimie Murgu boasts 8 establishments catering directly to tourists, while Bozovici hosts 12 such enterprises. This detailed insight underscores the pivotal role of these villages in shaping the region's tourism landscape, indicating their potential as focal points for further infrastructure development, promotion, and strategic investment to enhance the overall tourist experience in the area.

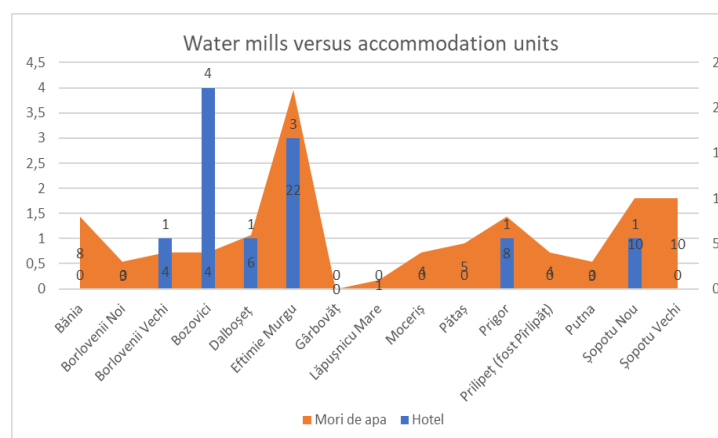


**Figure 7. The distribution of commercial companies in the villages in the area**

Source: Valorisation of the Almajului Valley through Tourism, Author(s): Busa Nicoleta, 2023, [1]

Based on the collected data, it is evident that the majority of tourism businesses within the investigated area are concentrated in just two villages. Specifically, these villages account for a significant 74% share of all tourism-related establishments identified in the study. This concentration underscores the importance of these villages as primary hubs for tourism activity within the broader region, highlighting their substantial contribution to the local tourism economy.

Rudariei Gorges located in the south-eastern part of Caraș-Severin County are recognized as a protected natural area, where natural elements (relief, flora, fauna) and anthropogenic species are protected. Their richness and variety is a great tourist potential and a significant value. The water mills complex is the largest in Southeast Europe, it is a testimony of the skill and ingenuity of the local people. The locals have understood that through sustained efforts and preserving their cultural identity, the unpolluted environment can develop a profitable business. Sustainable tourism can raise their living standards without changing their habits and the natural environment. At present, the first steps towards the development of sustainable tourism in the area of Rudariei Valley, namely in Eftimie Murgu commune, have been achieved.[8,11,13]



**Figure 8. Water mills versus accommodation units**

Source: authors' compilation 2024, [15]

When we talk about tourism, the most suggestive indicator is the number of accommodation places. If any of the other components of the HORECA field can be impacted by locals and visitors, hotels are used only by those who choose to stay overnight, becoming tourists. According to the data above, the largest number of accommodation units is in Bozovici, although there are not the largest numbers of water mills in this place. The development of Bozovici town did not have the water mills as its main starting point, but is based on the fact that it is the largest city, being the economic and cultural center of the area. In Eftimie Murgu, being a secluded village in the foothills of the mountains, tourism developed due to the number of visitors who came to the area and wanted to spend the night here. [6,7]

The situation of the other villages in the area where there is a significant number of mills, where tourism development did not take place or was not influenced by them are Sopotu Vechi and Sopotu Nou. The Sopotu Vechi were renovated in 2023 and are not known to tourists. The Sopotu Nou are less known and the development of tourism in the area can be correlated with other factors that are better promoted than the water mills, such as Nerei Keys and Dracului Lake.

## CONCLUSIONS

In Eftimie Murgu (Rudaria), the growth of tourism is intricately linked to the presence and active promotion of water mills. Simply having water mills in the area is insufficient for driving profitable businesses, particularly in the hospitality and catering (Horeca) sector, without concerted efforts in both online and offline promotion. The synergy between the historical charm of water mills and effective promotional strategies is essential for attracting visitors and creating sustainable tourism ventures in the region.

A tangible illustration of this phenomenon can be observed in Sopotu Vechi, where despite the presence of the most significant and historically valuable mills in the Almăj Valley, there is a notable absence of businesses in the hospitality and catering (Horeca) industry. This underscores the notion that the mere existence of cultural landmarks such as water mills does not inherently lead to the development of thriving tourism-related enterprises. Conversely, regional centers, even if not traditionally considered tourist destinations, demonstrate an ability to evolve and attract visitors. These more prominent villages not only draw tourists intentionally visiting the area but also capture the attention of passersby, thereby contributing to the broader tourism economy of the region.

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