

## AGRITOURISM MARKET IN ROMANIA: POTENTIAL, CONCENTRATION, AND DEVELOPMENT PERSPECTIVES

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### Abstract

*The paper proposes an in-depth analysis of Romania's agrotourism services market, highlighting its evolution and regional/counties concentration. Romania, renowned for its cultural and touristic diversity, employs agrotourism to facilitate authentic interactions with local communities, offering insights into native culture. Utilizing Clarivate, Google Scholar, and Research Gate databases, the research employs statistical processing and graphical representation. Market concentration is gauged using the Herfindahl-Hirschman and Gini-Struck indices. Findings reveal a dynamic national sector with an annual growth rate surpassing 10%. Regionally, concentration levels are notably high, with the North-West, Center, North-East, and South-East collectively contributing over 75%. County-level concentration is moderate, indicating potential development even in areas with untapped resources. Romanian authorities actively promote agrotourism, capitalizing on rural development potential.*

**Key words:** agrotourism, evolution, Romania, GSI, HHI, market concentration

### INTRODUCTION

Agritourism, a niche tourism sector, has seen significant growth in recent years in Romania, attracting an increasing number of both domestic and international tourists. It is centered around providing tourist services in traditional farmsteads or rural environments, allowing visitors to experience authentic rural life.

Against the backdrop of the COVID-19 pandemic, where consumers of tourist services sought to avoid urban congestion and traditional tourist resorts, agritourism has witnessed a growing preference among profiled consumers [8].

Agritourism brings benefits to rural households and serves as a means of leveraging local natural resources (landscapes, protected natural areas, local traditions, agricultural production, fauna, and flora). It promotes ecological and sustainable practices, emphasizing reduced consumption and showcasing rural lifestyles. In Romania, agritourism takes place in rural settings,

featuring picturesque landscapes and well-preserved traditions. Visitors can engage in traditional agricultural activities (harvesting, milking cows, cheese-making, or preparing traditional meals) with accommodation in local households (country houses or rural guesthouses), offering them the opportunity to immerse themselves in the local community. Traditional gastronomy stands out as a highlight of agritourism in Romania, allowing for the exploration of local cuisine and the tasting of traditional beverages and foods [15].

The 2023 statistical research carried out by Industry Research Bizz (IRB) reveals that the global valuation of the agritourism market stood at USD 4,290.62 million in 2022 [7]. Forecasts predict an expected compound annual growth rate (CAGR) of 8.09% in the subsequent years, culminating in a market valuation of USD 6,841.17 million by 2028.

The surge in instant booking options has positively impacted the global agritourism market, reducing waiting times and enhancing customer satisfaction. The IRB report

combines extensive quantitative and qualitative analyses, offering a comprehensive view of the market, from macro dynamics to micro details.

KBV Research (2023) [9] presents an even more optimistic forecast, expecting the Global Agritourism Market to reach \$10.7 billion by 2028, reflecting a robust 10.7% CAGR. The predominant cause of this growth is the substantial share of direct bookings, exceeding 80% of total sales. The market is categorized according to tourist activities into On-farm Sales, Outdoor Recreation, Entertainment, Educational Tourism, Accommodations, and other segments.

Marian (2017) underscores that agritourism in Romania represents a significant form of sustainable tourism, minimizing its impact on the natural environment while capitalizing on and preserving local natural and cultural resources. The transition of the Romanian economy from a centralized system to a market economy has fostered the development of rural areas and agritourism [11].

An evaluation of Romania's inherent potential in agritourism and tourism, conducted by Călina, Călina, and Iancu (2017), indicates a qualitatively high value, suggesting Romania can largely meet the diverse expectations of potential clients [1]. The study forecasts a substantial increase in the number of accommodation units, from 3,236 in 2020 to 7,113 units in 2030, alongside a growth in sector employment (5,072/2020 compared to 5,409/2030) [2].

The high absorption rate of European funds can significantly impact business development in agritourism. Funding initiatives targeting rural development and agritourism have led to a significant expansion of services within the sector [10].

Galluzzo (2020) presented analogous results, indicating that during the 2007-2016 timeframe, decoupled payments significantly influenced the expansion of agritourism in rural Romania more than other financial subsidies provided by the European Union through the Common Agricultural Policy [6]. The provision of agritourism services represents a business opportunity for Romanian entrepreneurs and a necessity for

rural communities with tourism potential. This form of tourism offers tourists a high-quality experience at a reasonable cost, promoting sustainable development and environmentally friendly activities [2].

Effective sustainable tourism management strategies should be based on relevant and consistent information about factors influencing the decision of agritourism consumers. A study by Dumitraș et al. (2017) highlighted that the decision to visit tourist parks in a protected area, crucial in the tourist offer's choice, can be influenced by existing facilities in the area, including the availability of agritourism accommodations [5].

In their study, Stanciu, Popescu, and Stanciu (2023) systematically analyzed specialized literature sourced from the Clarivate database. They employed the VOS Viewer software and focused their analysis on five specific keywords: "Rural Tourism," "Agrotourism," "Agritourism," "Ecotourism," and "Romania." The examination encompassed 440 articles, exposing that research concerning these keywords and their influence on the advancement of rural areas in Romania has constituted a noteworthy and evolving research subject in the last decade. Eight primary research themes associated with rural tourism, agrotourism, and ecotourism in Romania were discerned [14].

The research conducted by Drăgoi et al. (2017) revealed that economic indicators, including regional GDP and the extent of the national road network in the area, exert a positive influence on the presence of economic entities participating in agritourism [4].

Additional industry-specific factors, such as the number of employees and corresponding salary incomes, the overall volume of tourists, the proportion of tourism-related enterprises, and their contribution to the region's overall business activity and revenue, alongside tourists' inclination toward agritourism, contribute positively to entrepreneurial endeavors in agritourism. The study's findings underscore a direct correlation between resilient entrepreneurship in agritourism and the sustainable development of the region [4]. In this context, the purpose of this research is

to make an analysis of Romania's agrotourism services market, pointing out its evolution and regional/counties concentration, using the Herfindahl-Hirschman and Gini-Struck indices.

## MATERIALS AND METHODS

The bibliographic research was conducted through open-access articles from Clarivate, Google Scholar, and Research Gate, as well as official information provided by relevant ministries and professional associations.

To conduct this research, data concerning the agrotourism sector were obtained from the National Institute of Statistics and the Ministry of Agriculture and Rural Development.

The pertinent information collected was processed using statistical methods, followed by graphical representation and interpretation. Evaluating the market concentration of agritourism services in Romania can be done through the Herfindahl-Hirschman Index (HHI), calculated by the sum of the squared market shares of all factors in the sector.

In this research, HHI represents the value of how a small number of regions can account for a large share of the traditional products market (formula 1).

$$HHI = \sum G_i^2 \dots\dots\dots(1)$$

In formula 1,  $G_i$  represents the market share of development region  $i$ , and  $N$  represents the total number of regions (8 in this case).

The higher the HHI market value, the more the production is concentrated in a small number of factors. Generally, when the HHI value is below 1,000, the market concentration is considered low; at values between 1,000 and 1,800, it is considered moderate, and when the HHI value is over 1,800, the market is considered concentrated [3].

An assessment of market concentration at the county level can also be conducted using the Gini-Struck Index (GSI). Formula 2 was applied by Stanciu et al. (2015) for assessing the concentration of the meat processing sector [18].

The analytical method was proposed by the team of authors Săvoiu, Crăciuneanu, and Țaicu (2010) [13].

$$GSI = \sqrt{\frac{N \sum G_i^2 - 1}{N - 1}} \quad (2)$$

where:  $G_i$  represents the share of county  $i$  in the total, and  $N=41$  is the number of counties. If the GSI value tends to 100, this indicates a high value of market concentration, and if the coefficient tends to 0, it suggests a low concentration value of the analysed market structure.

To validate the results, they were compared with other relevant findings in the specialized literature.

## RESULTS AND DISCUSSIONS

According to data provided by the National Institute of Statistics (NIS) [12] in 2023, the number of accommodation units has increased significantly in recent years, rising by 87.45% from 400 in the year 2000 to 3,498 in 2023 (Figure 1).

The post-COVID-19 pandemic period has seen a relatively constant number of agritourism guesthouses, with a 15% growth compared to 2019.

This growth can be attributed to factors such as lockdown measures and changes in consumer behaviour, including within the tourism services sector [16], [17].

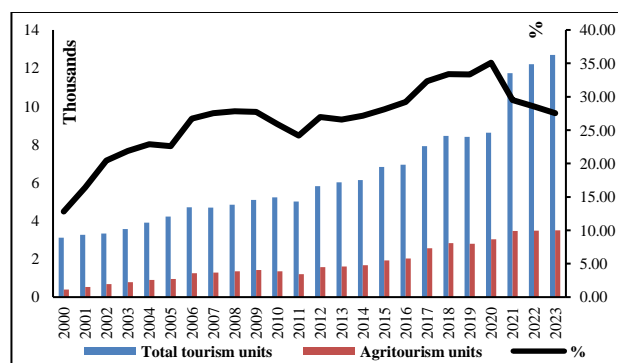


Fig. 1. Evolution of agritourism versus tourism units  
 Source: Authors, by using NIS (2023) [12].

As a percentage, the number of agritourism-oriented units relative to the total number of tourist units has varied, reaching a minimum of 12.85% in 2000 and a peak of 35.10% in 2020. In 2023, this segment constituted

27.55% of the total registered tourist units at the ministry.

The distribution of the 3,498 registered guesthouses in 2023 across development regions is depicted in Figure 2.

Notably, the year 2020 marked the peak development of agritourism guesthouses due to the COVID-19 pandemic, restricting air travel and prompting Romanian tourists to seek more isolated locations, preferably in mountainous areas or the Danube Delta at the national level.

Ranked last nationally, the Bucharest-Ilfov Region, with a mere 0.03% share, has only one registered agritourism guesthouse in Ilfov County. Leading the national chart is the Center Development Region with 988 units, followed by North-West with 835 units, and South-East with 377 units. These regions benefit from favourable geographical conditions (the Carpathian Mountains or the Danube-Delta Danube), cultural and culinary traditions, potential for sports activities, and a historical presence of accommodations in mountainous areas, fostering the development of these businesses.

In fact, these regions, housing over 52% of the total profiled units, are home to counties with the highest number of agritourism accommodations.

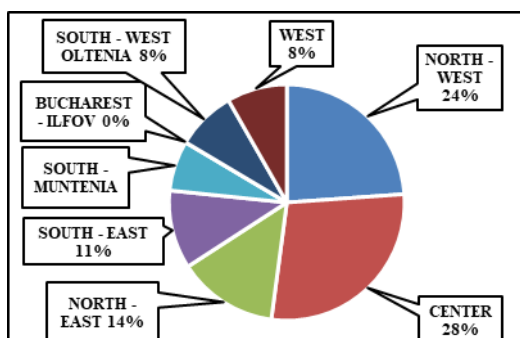


Fig. 2. Agritourism units by development region  
 Source: Authors, by using the data from NIS (2023) [12].

The counties with over 100 agritourism units are illustrated in Figure 3. Topping the list is Brasov with 372 units, followed by Suceava (271), Maramures (254), Tulcea (241), and Harghita (231).

With 1,368 guesthouses, these counties account for over 38% of the national total (figure 3).

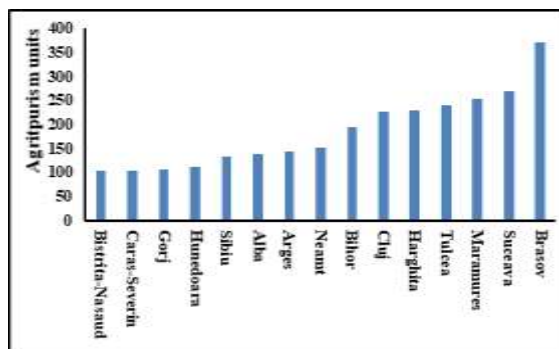


Fig. 3. Top 100 agritourism units by counties  
 Source: Authors, by using the data from NIS (2023) [12].

At the opposite end are Braila and Ilfov counties (1 agritourism unit each), along with Ialomita and Teleorman (2 units), and Botosani (3 units).

### The market concentration of agritourism services in Romania at the regional development level

Based on the information outlined in Table 1, the computed HHI value stands at 1,855.4670, signifying a notable level of concentration within the agritourism services market.

The utilization of the market concentration evaluation technique on a national scale across development regions implies a market with a significant degree of concentration. This calculation holds precision, as two development regions collectively account for more than 50% of the total entities providing agritourism services on a nationwide scale.

Table 1. HHI Calculation

Development Region	Unit	$G_i(\%)$	$G_i^2$
North - West	835	23.87	569.8143
Center	988	28.24	797.7637
North - East	481	13.75	189.0822
South - East	377	10.78	116.1564
South - Muntenia	240	6.86	47.07419
Bucharest - Ilfov	1	0.03	0.000817
South - West Oltenia	287	8.20	67.31691
West	289	8.26	68.2584
Total	3,498	100%	1,855.467
HHI=Sum ( $G_i^2$ )			1,855.467

Source: Authors, by using the data from NIS (2023) [12].

There is a correlation between the income of the population and the development of agritourism. Regions with a high GDP per

capita, such as Center and North-West, have a significant number of agritourism guesthouses. An exception can be considered for Bucharest-Ilfov, where the characteristics of the area, marked by a high degree of urbanization, do not offer favorable conditions for the development of businesses in this field.

Despite the South-East Region having areas with high agritourism potential, such as the Danube Delta, the Black Sea, and the Carpathian Mountains, the lack of infrastructure, absence of local measures encouraging agritourism development, or low population density result in a limited number of guesthouses. With the exception of Tulcea

County, where local specificity and tradition have led to numerous establishments in this field, the other counties are poorly represented. The South-East Region also experiences limited development in railway transportation infrastructure, and there is no highway connecting the mountainous area to economically prosperous regions. The construction of a bridge over the Danube River at Braila has the potential to rejuvenate the sector in the adjacent counties.

#### The market concentration of agritourism services in Romania at the county level

The calculated values of Gini-Struck index are presented in Table 2.

Table 2. GSI Calculation

No.	County	Units	$G_i$	$G_i^2$	No.	County	Units	$G_i$	$G_i^2$
1.	Braila	1	0.0286	0.0008	22	Arad	52	1.4866	2.2099
2.	Ilfov	1	0.0286	0.0008	23	Mures	62	1.7724	3.1415
3.	Ialomita	2	0.0572	0.0033	24	Mehedinti	71	2.0297	4.1198
4.	Teleorman	2	0.0572	0.0033	24	Buzau	75	2.1441	4.5971
5.	Botosani	3	0.0858	0.0074	26	Valcea	91	2.6015	6.7677
6.	Galati	4	0.1144	0.0131	27	Bistrita-Nasaud	103	2.9445	8.6703
7.	Calarasi	4	0.1144	0.0131	28	Caras-Severin	103	2.9445	8.6703
8.	Giurgiu	4	0.1144	0.0131	29	Gorj	108	3.0875	9.5325
9.	Olt	4	0.1144	0.0131	30	Hunedoara	112	3.2018	10.2517
10	Satu Mare	11	0.3145	0.0989	31	Sibiu	134	3.8308	14.6747
11	Vaslui	13	0.3716	0.1381	32	Alba	139	3.9737	15.7903
12	Dolj	13	0.3716	0.1381	33	Arges	145	4.1452	17.1829
13	Iasi	14	0.4002	0.1602	34	Neamt	152	4.3453	18.8820
14	Constanta	18	0.5146	0.2648	35	Bihor	195	5.5746	31.0763
15	Timis	22	0.6289	0.3956	36	Cluj	227	6.4894	42.1126
16	Bacau	28	0.8005	0.6407	37	Harghita	231	6.6038	43.6098
17	Dâmbovita	37	1.0577	1.1188	38	Tulcea	241	6.8897	47.4673
18	Vrancea	38	1.0863	1.1801	39	Maramures	254	7.2613	52.7264
19	Salaj	45	1.2864	1.6550	40	Suceava	271	7.7473	60.0204
20	Prahova	46	1.3150	1.7293	41	Brasov	372	10.6346	113.0957
21	Covasna	50	1.4294	2.0432	Sum	<b>N=41</b>	<b>3,498</b>	<b>100%</b>	<b>524.2300</b>

Source: Authors, by using the data from NIS (2023) [12].

The calculated GSI value is 23.18, indicating a moderate level of concentration in the market of tourism services at the county level. This indicates that there is no singular dominance of a small number of providers or players in the market, but neither is there a total dispersion of offerings. Instead, there is a balanced distribution of businesses and tourism services among multiple providers or actors, contributing to a relatively or moderately competitive environment in the county-level tourism sector.

The calculated values are accurate, considering that in the North-East development region, there are two counties, Suceava with 271 agritourism units, and Neamț with 152 units, as well as Argeș (142 units) in the South Muntenia Region, which somewhat reduces the concentration level observed in the Center and North-West Regions.

Hilly and mountainous areas have the highest potential for practicing rural agritourism due to their landscapes of rare beauty and the high

quality of air and water.

Considering the climatic conditions and the nature of relief factors, these areas often face challenges in plant agricultural exploitation. The development of rural tourism in these regions would represent, alongside animal husbandry, a significant step towards their economic development.

The major issue in this sector is not the facilities for investors but rather the precarious state of physical infrastructure, without which the potential of these areas cannot be fully realized.

Thus, many localities in hilly and mountainous areas grapple with issues related to road infrastructure and utilities, such as the absence of natural gas supply, lack of running water, and sewage systems.

Population density can be a disadvantageous factor for the development of the sector in some regions of Romania. Counties like Vrancea, Sălaj, or Timiș, characterized by a limited number of residents, also face reduced opportunities for practicing agritourism.

The absence of online promotional tools for agritourism potential, such as online tourist maps, serves as an explanation for the limited development of the sector in counties ranked lower in the standings.

The government should give increased attention to improving airport and road infrastructure and focus on updates to address issues related to connectivity, congestion, and safety on access roads. A viable partnership between the Romanian Ministry of Transport and the Ministry of Tourism can expedite the development of transportation infrastructure, contributing to the enhancement of spatial accessibility at both national and regional levels.

## CONCLUSIONS

The agritourism services market in Romania has undergone a remarkable and consistent growth in recent years, witnessing an almost 900% increase in specialized units since the baseline year of 2000.

This expansion has been particularly pronounced in the Center and North-West regions, characterized by favourable

geography, significant tourism, and sports potential, as well as the preservation of rich cultural and culinary traditions.

Examining the concentration of tourism services at both regional and county levels reveals high concentration values at the regional scale, while the county-level concentration remains moderate.

Factors influencing market concentration include historical tradition, the entrepreneurial spirit of local communities, the development of transportation and utility networks, and the average income per inhabitant.

This comprehensive analysis provides valuable insights for crafting superior strategies to capitalize on Romania's agritourism potential, fostering the development of best practices that can serve as effective business models for entrepreneurs in less developed regions, particularly in terms of tourism services.

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