

ESTIMATING THE ECONOMIC POTENTIAL OF RURAL TOURISM IN THE GEOGRAPHICAL AREA OF OLTEНИA

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Abstract

Rural tourism represents an important sector for local economies in the geographical region of Oltenia, but its degree of exploitation is very low compared to its real potential. The present paper is concentrated on pointing out the losses registered in this sector due to the lack of capitalization of economic potential starting from the main hypothesis that in the villages with medium, high and very high potential there is at least one boarding house and the region occupancy rate remains constant at a level of 16.94%. The analysis reveals that in the present, with the current tourist infrastructure, the rural tourism sector loses each year a minimum sum of 900 thousand Euros and the degree of exploitation is of only 24.11%.

Key words: tourism potential, economic potential, degree of exploitation of rural tourism, sector losses

INTRODUCTION

The rural tourism, by its specific infrastructure, income and generated additional employment and its role in local conservation, is a viable means to support balanced development of rural areas. However, although tourism is a real prospect of developing rural areas, its impact on local economies is very low, mainly due to inappropriate capitalization of local, natural and anthropogenic tourism potential.

This paper focuses on assessing the economic potential as generated by the exploitation of rural tourism. In this context, this paper aims to mainly highlight the economic implications of the lack of capitalizing rural tourism at its real potential.

MATERIAL AND METHOD

The research on estimating the economic potential of rural tourism was conducted in the geographical area represented by the region of Oltenia, which, by territorial-administrative terms lies within Dolj, Gorj, Mehedinți (without Orșova City and Eșelnița, Dubova, Svinetu villages, belonging to the Banat area), Olt (excluding areas east of the river Olt, which are part of Muntenia), Vâlcea County (excluding areas east of the river Olt). The area comprises 341 rural villages, territorially distributed as follows: 104 villages – Dolj County (30.5%), 61 villages - Gorj County (17.9%), 58 villages -

Mehedinți County (17%), 58 villages – Olt County (17%), 60 villages – Vâlcea County (17.6%). Depending on the predominant landscape type of the localities, the database is structured as follows: 196 plain relief villages (57.5%), 115 hilly terrain villages (33.7%), 30 mountain terrain villages (8.8%).

The research conducted to estimate the economic potential of rural tourism in the geographical area of Oltenia had three phases: the analysis of touristic potential; the analysis of rural tourism development in 2011 (to create a base of comparison); the estimation of the degree of exploitation potential of the rural tourism sector.

The analysis of the touristic potential was based on the tourism resources potential indicators (the score given to the tourist potential established by the National Spatial Plan - NSP – Travel Areas) through which the rural areas have been divided as follows: villages with very high tourism potential - which have on their territory biosphere reservations with values of national and world heritage interest, national parks, natural monuments, high potential villages - these have great tourism potential and specific infrastructure, partially accomplished but favorable to priority development of tourism; medium potential villages - these have high and favorable tourism potential for the development of the tourism function; reduced potential villages - these are villages with natural and / or anthropogenic tourist objectives capitalized only locally).

The analysis of the rural touristic development was based on data from cities and counties for 2011, available from the National Institute of Statistics (establishments of tourist reception with functions of tourists accommodation by type of structure, existing tourist accommodation capacity by type of tourist accommodation structures, tourist accommodation capacity by type of tourist accommodation structures) and on data collected in 25 boarding houses from the region (used to estimate the medium prices per county in 2010).

The evaluation of the economic potential of rural tourism (economic size of the sector expressed by the turnover of the economic agents as the direct result of renting accommodation) is made based on the above mentioned statistic indicators by applying the following calculations:

- equivalent factor of tourist in respect to touristic development potential score which permits the estimation of the number of the tourists that can be brought by a potential score at a village level:

$$C_i = \left(\sum T_{ji} \right) / \left(\sum Paj_i + Pbj_i \right) = \left(\sum T_{ji} \right) / \left(\sum Pj_i \right) \quad (1)$$

where:
 T_{ji} = number of tourist arrivals in 2011 in village j from county i
 Paj_i = touristic resources scores (natural and anthropogenic) in village j from county i
 Pbj_i = infrastructure resources scores in village j from county i
 Pj_i = touristic development potential scores in village j from county i
 C_i = equivalent factor for county i
 i = county
 j = village which received tourists in 2011

- tourist number:

$$Tek_i = \sum (Pk_i * Ci) \quad (2)$$

where:
 Tek_i = estimated number of tourists for county i at the level of villages k
 Pk_i = touristic development potential scores from village k from county i
 C_i = equivalent factor for county i
 i = county
 k = village with touristic potential (low; medium; high; very high)

- overnight stays:

$$Iek_i = Tek_i * \left(\frac{\sum I_{ji}}{\sum T_{ji}} \right) \quad (3)$$

where:
 Iek_i = estimated overnight stays for county i on the level of villages k
 Tek_i = estimated number of tourists for county i on the level of villages k
 T_{ji} = number of tourists arrived in 2011 in village j from county i
 I_{ji} = overnight stays number in 2011 in village j from county i
 i = county
 j = village which received tourists in 2011
 k = village with touristic potential (low; medium; high; very high)

- number of accommodation places:

$$Lk_i = \frac{Iek_i}{Goi * Zi} \quad (4)$$

where:
 Lk_i = number of accommodation places for county i on the level of villages k
 Iek_i = estimated overnight stays for county i on the level of villages k
 Goi = occupancy rate for county i in 2011 (Indices of net using the touristic accommodation capacity in operation)
 Zi = average number of operating days in county i in 2011
 i = county
 k = village with touristic potential (low; medium; high; very high)

- tourist and agro-tourist boarding houses needed to cover the estimated overnight stays:

$$Pensk_i = \frac{Lk_i}{Di} \quad (5)$$

where:
 $Pensk_i$ = Tourist and agro-tourist boarding houses needed in county i on the level of villages k
 Lk_i = number of accommodation places for county i on the level of villages k
 Di = average size of a tourist and agro-tourist boarding house in county i in 2011
 i = county
 k = village with touristic potential (low; medium; high; very high)

- the degree of use of rural tourist potential:

$$G_i = \frac{CAji}{CAki} * 100 = \frac{\sum Ij_i * Tm_i}{\sum Iek_i * Tm_i} * 100 \quad (6)$$

where:
 G_i = the degree of use of rural tourist potential
 $CAji$ = turnover in 2011 for county i on the level of villages j
 CAk_i = estimated turnover for county i on the level of villages k
 Ij_i = overnight stays for county i on the level of villages j
 Iek_i = estimated overnight stays for county i on the level of villages k
 Tm_i = medium price per person per night in county i
 i = county
 j = village which received tourists in 2011
 k = village with touristic potential (low; medium; high; very high)

RESULTS AND DISCUSSIONS

Tourist development potential

Within the 341 rural villages from the geographical region of Oltenia only 69 have the potential for high and very high tourism development (17 villages in the plains, 31 in the hilly area and 21 in the mountainous area) [1].

The analysis in the region allowed us to see that the tourism accommodation structures proper to rural tourism (83 guesthouses) were developed only in 24 cities located in the plains with medium potential (5 villages), in the hills with high and very high potential (4 villages), and in the mountain area with medium, high and very high potential (15 villages). It is also noticeable that in every county there is a concentration of tourist offer in areas with natural and anthropogenic resources, but has either tourist infrastructure or technical infrastructure problems, which limits the number of tourists arriving in these areas and lead to low occupancy.

Dolj County comprises 104 rural villages of which 101 are located in the plains and 3 in the hilly area, representing 30.5% of localities from the geographical area of Oltenia. Through the NSP, all rural villages have obtained scores for the natural resources potential, 23 villages for the anthropogenic potential, 3 villages for the tourism infrastructure (Bratovoești, Bucovăț, Ișalnița) and 3 villages for the high potential in technical infrastructure. All these given scores have determined that in the Dolj County tourism development potential has the following characteristics: 54 villages have low potential, 41 villages have medium potential (40 with a plain landscape and one with hilly terrain) and 9 villages with high potential (8 with plain terrain and one with a hilly terrain).

The Gorj County includes 61 rural villages, of which 4 are located in the plains, 47 in the hilly areas and 10 in the mountain areas, representing 17.89% of localities in the geographical area of Oltenia. Within 12 villages, there are 24 protected areas of natural interest with a total area of 3544.3 ha. Through the NSP, all municipalities have obtained points for the natural

resources potential, 34 villages for the anthropogenic potential, 6 villages for the tourism infrastructure (Plopșoru, Padeș, Peștișani, Arcani, Baia de Fier, Săcelu) and 6 high potential villages in the technical infrastructure. All these given scores have determined that in the Gorj County tourism development potential has the following characteristics: 3 villages have low potential, 29 villages have a medium potential (27 with hilly terrain), 22 villages have a high potential (14 with hilly terrain and 5 with mountain relief) and 7 villages with very high potential (3 with hilly terrain and 4 with mountain terrain).

Olt County comprises 58 rural villages, located in the plains, representing 17.00% of localities in the geographical area of Oltenia. Within 11 villages there are 7 protected areas of natural interest with a total land area of 4675.8 ha. Through the NSP, all municipalities have obtained points for the natural resources potential, 7 villages for anthropogenic potential and 1 village with high potential of technical infrastructure. No Olt County village received any score for tourism infrastructure. All these given scores have determined that in the Olt County, tourism development potential has the following characteristics: 25 villages have low potential, 30 villages have medium potential and 3 villages have high potential.

Olt County has a special situation in our approach. Although most villages are located in the plain terrain, with many protected areas and more areas that have natural and anthropogenic resources with tourism potential, the rural tourism sector is not developed even in the southern plain Danube area. The only available information we have is that in 2011 there were 16 beds in a guesthouse in Bobicești village. This does not allow us to estimate according to the methodology applied in the other counties, so we will exclude municipalities in this area of assessment.

Mehedinți County comprises 58 villages, of which 23 are located in the plains, 25 in the hills and 10 in the mountain areas, representing 17.00% of localities in the geographical area of Oltenia. Within the 14 localities there are 26 protected areas of natural interest with a total area of 1539.5 ha. Through the NSP, all municipalities have obtained scores for the natural resources potential, 11 villages for the anthropogenic potential, 3 villages for tourism infrastructure (Prunișor, Ilovița, Bala) and 4 villages for the high technical infrastructure potential. All these given scores have determined that in the Mehedinți County, tourism development potential has the following characteristics: 13 villages have low potential, 29 villages have medium potential (14 with plain terrain and 11 with hilly terrain), 15 villages with a high potential (8 with hilly terrain and 6 with mountainous terrain) and 1 with very high potential (with hilly terrain).

Vâlcea County includes 60 rural villages, 10 are located in the plains, 40 in the hilly areas and 10 in the mountain areas, representing 17.59% of

localities in the geographical area of Oltenia. Within the 6 regions there are 12 protected areas of natural interest with a total area of 352.7 hectares. Through the NSP, all municipalities have obtained points for the natural resources potential, 19 municipalities for the anthropogenic potential, 2 villages for the tourism infrastructure (Mălaia and Voineasa) and 1 high potential village for technical infrastructure. All these given scores have determined that in the Vâlcea County, tourism development potential has the following characteristics: 14 communities have reduced potential, 34 with medium potential (25 with hilly terrain and 4 with mountainous terrain), 9 villages with high potential (3 with hilly terrain and 4 with mountainous terrain) and 3 villages with very high potential (1 village with hilly terrain and 2 with mountainous terrain).

Rural tourism development at a regional and county level in 2011

In 2011, statistical evidence [2] (Table 1) reveals in the rural structures from Dolj County, an occupancy rate of 26.05% and 129 places in 5 related boarding houses, which allows us to estimate that tourist capacity in operation was of 27110 places-days and the existing capacity of 25.8 places, occupied over the course of 210.2 days of operation. It is known that within these structures have arrived 5293 tourists who stayed 7062 nights which resulted in an average of 1.3 overnight stays per person.

Table 1

Rural tourist sector in Oltenia region in 2011

	UM	Dolj	Gorj	Mehedinți	Olt*	Vâlcea	Oltenia
Tourist and agro-tourist boarding houses)	no	5	19	5	1	32	62
Average size of a tourist and agro-tourist boarding house	places/boarding house	25.8	17.2	14.8	16.0	15.7	16.9
Existing accommodation capacity	places	129	326	74	16	501	1046
Average number of operating days	days	210.2	263.3	341.7	214.0	170.4	217.0
Accommodation capacity in operation	places - days	27110	85820	25287	3424	85384	227025
Occupancy rate (Indices of net using the touristic accommodation capacity in operation)	%	26.05	20.95	22.38	32.10	12.28	18.62
Overnight stays	no	7062	17976	5658	1099	10485	42280
Turist arrivals	no	5293	5828	2517	113	3865	17616
Overnight stays per tourist	no nights/tourist	1.3	3.1	2.2	2.4	2.7	2.4

* the data for Olt county are missing

In the rural area of the Gorj County, there were taken into statistics 19 structures of accommodation, which had a capacity of 326 places and an operating tourism capacity of 85820 places-days with an average of 263.3 days of operation. In these structures came 5828 tourists which stayed

17976 nights leading to an average of 3.1 nights per person and an occupancy rate of 20.95%. In the rural areas of the Mehedinți County statistics were taken for over 5 tourist accommodation structures, which had a capacity of 74 places and 25287 places-days operation tourist capacity and an average of 341.7 days of operation. In these structures came 2517 tourists which stayed 5658 nights leading to an average of 2.2 nights per person and an occupancy rate of 22.38%. On the other hand, in the rural county of Vâlcea, there were taken into statistics over 32 structures of tourism, which had a capacity of 501 places and 85384 places-days operation tourist capacity and an average of 170.4 days of operation. In these structures came 3865 tourists which stayed 10485 nights leading to an average of 2.7 nights per person and an occupancy rate of only 12.28%.

Mixing the above information, the assessment of the rural tourism sector in the geographical area of Oltenia reveals that in statistic terms here exist only 62 rural boarding houses with an existing accommodation capacity of only 1046 places which determined in 2011 an occupancy rate of 18.62%.

Economic potential of rural tourism in the geographical region of Oltenia

As mentioned earlier, for our goal we will further estimate the potential revenues that rural tourism can generate for each analyzed county based on the main estimated indicators of tourist traffic. Thus, we considered only rural villages with medium, high and very high potential from each county and we assumed that there is a boarding house in each of them (Table 2).

Tabel 2

The economic potential of the geographical region of Oltenia

Indicators	UM	Dolj	Gorj	Mehedinți	Vâlcea	Oltenia
2011 Values						
Number of villages	no	4	8	2	8	62
Touristic development potential points ($\sum Pk_i$)	point	55.02	265.12	88.51	214.5	542.63
- touristic resources points ($\sum Pak_i$)	point	22.5	195	38.5	131	349
- infrastructure resources points ($\sum Pbk_i$)	point	32.52	70.12	50.01	83.5	193.63
Estimated number of tourists ($\sum Tek_i$)	no	5293	5828	2517	3865	17616
Estimated overnight stays ($\sum Iek_i$)	no	7062	17976	5658	10485	42280
Number of accommodation places ($\sum Lk_i$)	places	129	326	74	501	1046
Touristic and agro-touristic boarding houses needed to cover the estimated overnight stays ($\sum Pensk_i$)	no	5	19	5	32	62
Turnover ($\sum CAk_i$)	lei	335445	889812	254610	464904.9	1963906
	thou					
	euro*	74.5	197.7	56.6	103.3	436.4
Estimated values						
Indicators	UM	Dolj	Gorj	Mehedinți	Vâlcea	Oltenia
Number of villages	no	104	61	58	60	283
Touristic development potential points ($\sum Pk_i$)	point	1318.06	1345.7	994.4	1029.0	4687.16
- touristic resources points ($\sum Pak_i$)	point	610.00	744.0	528.0	588.0	2470
- infrastructure resources points ($\sum Pbk_i$)	point	708.06	601.7	466.4	441.0	2217.16
Estimated number of tourists ($\sum Tek_i$)	no	126533.8	29605.2	27842.1	18522.2	202503.3
Estimated overnight stays ($\sum Iek_i$)	no	168823.2	87901.1	85958.7	44597.0	387280.0
Number of accommodation places ($\sum Lk_i$)	places	3083.1	1593.6	1124.0	2131.3	7932.0

Touristic and agro-touristic boarding houses needed to cover the estimated overnight stays ($\sum P_{ensk_i}$)	no	117	92	76	137	422
	lei	8019104	4351099.5	3868140.5	1977435.1	18215779.1
Turnover ($\sum CAk_i$)	thou euro*	1782.0	966.9	859.6	439.4	4048.0
The degree of use of rural tourist potential (Gi)	%	4.18%	20.45%	6.58%	23.51%	10.78%
Losses in the sector	thou euro*	1707.5	769.2	803	336.1	3611.6

*1 euro = 4.5

Applying the described methodology results that within the region, the rural tourism sector has the potential to develop 360 new boarding houses with an existing capacity of 7932 places. In the context of a 18.62% occupancy rate, the number of overnight stays would amount to 387280 nights and in the sector would come around 202,5 thousand tourists, eleven times more than in 2011. Taking into account the tourist potential of each county, we see that the Mehedinți and Gorj Counties are able to attract most tourists mainly due to natural potential available to them (relief of hills and mountains), but also the other counties have the potential to attract a considerably higher number than in 2011.

Attracting tourists by creating tourist infrastructure has the greatest potential to influence the local economy. Because the sector is not exploited at his real potential the losses estimated for the sector are very high. The estimation of the economic potential (economic size of the sector expressed by the turnover of businesses (minimum potential income) reveals, under the assumptions outlined above, the following: *Dolj County* - degree of use of touristic potential of only 4.18% of the minimum economic potential; resulting in a loss of 1707.5 thousand euros in the sector; the increase in turnover of businesses of over 24 times within the sector; *Gorj County* - degree of use of tourist potential of 20.45% of the minimum economic potential; resulting in a loss of 769.2 thousand euros in the sector; increase in turnover of 389.1%; *Mehedinți County* degree of use of touristic potential of 6.58% of the minimum economic potential; resulting in a loss of 803 thousand euros in the sector; increase in turnover of businesses of almost 15 times; *Vâlcea County* - high leverage of 23.51% of the minimum economic potential; resulting in a loss of just 336,1 thousand euros in the sector; increase in turnover of businesses of 325.4%.

CONCLUSIONS

Rural tourism is weakly capitalized in the geographical region of Oltenia. The rural tourism from the region is currently capitalized at a level of 10.78% of its minimum economic potential resulting in a loss of almost 3611,6 thousand euros in the sector. The minimum economic potential of rural tourism is of 4.1 million euros and to ensure this level is necessary to develop tourism infrastructure with a minimum of 360 boarding houses, which can provide an extra 6886 accommodation places.

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