# THE RURAL TERRITORIAL INFRASTRUCTURE, THE SUPPORT FOR RURAL TOURISM ECONOMY IN THE DANUBIAN AREA OF THE SOUTH MUNTENIA REGION

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#### Abstract

The scope of agritourism activities is related to the existent territorial infrastructure. For this reason there is a pronounced differentiation and diversification of rural tourism and agritourism types in the South-Muntenia Region which sometimes generate confusion. Meaning that, according to the economic character, the Danubian rural area can delimitate villages with agricultural functions (based on the production of cereals, as well as the viticultural and zootechnical productions), those with agri-industrial functions, with agricultural and fishing functions and villages with agricultural and tourism functions. As such, the agritourism of the area considered these very mixed types characterized by the irregularity of the touristic services. We refer to the uniqueness due to the Danubian geographic area, but also to the uniqueness in time (mostly due to the fact that the agritourism season is constantly different). This context brings out the need to know and evaluate the different types of infrastructure which limit the tourist's access in the area.

Key words: agritourism, infrastructure, accommodation, urbanistic comfort functionality, rural area revitalization.

# INTRODUCTION

The rural tourism is the type of tourism practiced in the rural environment, as a local development economic factor, which results from the services rendered to customers in order to satisfy their needs. As they appeal to the under-privileged categories of the population, and especially during periods of economic crisis, knowing the infrastructure with special reference on the cheap accommodation and transport routes is necessary. The infrastructure is considered a resultant of the agritourism programs related to means of communication, public utilities, buildings etc., with their different upgraded types in the rural area. In relation to this issue the agritourism potential of the Danubian area in the South-Muntenia Region has been studied, also having the greatest implications in the capitalization of local resources and in boosting the life conditions of the inhabitants, in the social and economic development of the

rural locality and of the community in general, in the protection and preservation of the natural and built environment, which in this context mean bringing an impulse to the rural economic activities. Therewith, by developing the infrastructure of this area, one can capitalize the natural framework, which is in itself a development side of the local Danubian economy fitting in the scope of services necessary to the rural society[1]

## MATERIAL AND METHOD

The entire own economic and social activity of the area is based on harmonizing the two essential and inherent factors - nature and human being. The agritourism, in the context of these aspects, discloses the fact that the social efficiency reaches an extremely sensitive point of the rural life, meaning the quality of life, population behavior, degree of education and civilization. In order to highlight these aspects the hereby paper stresses the necessity of a local infrastructure, making references to accommodation and means of transport. Hence, we consider the following indicators:

*a) touristic activity transport efficiency*, which is calculated in different manners according to the type of exploitation. These indicators may have the following structural form: the density of public roads, the weight of the upgraded roads, lightweight blanket roads;

accommodation *b*) activity efficiency indicator. The accommodation is the first of the touristic services rendered, representing approximately 40% of the total turnover. The efficiency of the accommodation can be capitalized through general indicators, such as the number of houses in the rural environment and their capacity, along with analytical forms referring to the number of houses per 1000 inhabitants, the condition of the current water, sewerage and natural gas supply endowments. All these indicators in absolute and relative figures have been rendered as the current condition of the rural communities in the Danubian counties area of the South-Muntenia development Region; there were also comparisons performed with reference to the total of the entire region.

Only by knowing these accessibility levels can agritourism become a concrete model for revitalizing the rural area, founded not on purely conservative reasons exclusively subjected to the rural life system, but on an economic, spiritual and social need.

## **RESULTS AND DISCUSSIONS**

### 1. The structure of road transport routes.

At this point, public roads represent the most popular type of structure among tourists and it is directly linked to their comfort during travelling. This means that the most important place in regards to transportation is reserved to road transport and that is why the issue of expanding the transport network is always a current one. The elements in *table* 1[2] show the fact that for the Danubian territory in the South-Muntenia Region, for the period between 2000 - 2008 these communication means, the communal and county roads, have been developing differently. According to the data in this table:

- concerning the density of public roads (expressed in km/sqkm), one can observe that at the level of the entire region there is a tendency for accession from 34.30 in 2000 to 36.50 km/sqkm in 2008. This tendency for accession for the four Danubian counties. But, the level of this density is lower than the average of the region (for 2002 in Călărași county the minimum level is 23.10 and in 2006 the minimum level is 24.90 km/sqkm, and in Teleorman county these levels vary from 26.20 km.sqkm in 2000 to 26.30 km/sqkm in 2008);

Table 1. The evolution of roads density in Danubiancounties of the South-Muntenia Region

Str. Teritor.	2000	2001	2002	2003	2004	2005	200 6	200 7	200 8		
Public roads density (km/100 sqkm)											
Total reg.	34,30	34,30	34,40	34,30	34,8 0	34,8 0	35,00	35,90	36,50		
Călărași	23,10	23,10	23,10	23,10	24,9 0	24,9 0	24,90	26,50	25,90		
Ialomița	25,50	25,60	25,60	25,60	25,7 0	25,7 0	25,70	25,90	25,90		
Giurgiu	30,60	30,70	30,70	30,70	30,8 0	30,8 0	32,20	32,30	32,30		
Teleorma n	26,20	26,20	26,20	26,20	26,3 0	26,3 0	26,30	26,30	26,30		
Upgraded	Upgraded roads (% of total)										
Total reg.	27,10	27,40	27,40	27,90	29,0 0	29,2 0	29,30	29,30	32,30		
Călărași	34,60	34,70	34,70	34,70	39,0 0	39,1 0	39,10	39,20	40,10		
Ialomița	32,80	34,40	34,70	34,70	34,9 0	34,9 0	31,20	32,00	34,50		
Giurgiu	33,20	33,60	33,60	33,60	34,8 0	35,1 0	33,60	36,70	52,90		
Teleorma n	32,70	33,00	32,80	36,00	39,0 0	39,1 0	42,10	42,00	56,30		
Upgraded	Upgraded roads of total national roads (%)										
Total reg.	97,50	98,30	97,80	97,70	95,3 0	95,4 0	95,40	95,40	95,70		
Călărași	96,60	97,40	97,40	97,40	97,2 0	97,9 0	97,90	98,00	99,00		
Ialomița	86,80	91,40	92,00	92,00	92,1 0	92,1 0	92,10	92,30	92,30		
Giurgiu	100,0 0	100,0 0	100,0 0	100,0 0	93,5 0	93,5 0	93,50	93,50	93,50		
Teleorma n	99,40	99,40	99,40	99,40	89,5 0	89,5 0	89,70	89,20	89,50		
Lightweig	Lightweight blanket roads of total roads (%)										
Total reg.	2,40	1,60	1,70	1,80	3,50	3,40	3,40	3,40	3,40		
Călărași	3,40	2,60	2,60	2,60	2,80	2,10	2,10	2,10	2,10		
Ialomița	13,20	8,60	8,00	8,00	7,90	7,90	7,90	7,90	7,90		
Giurgiu	0,00	0,00	0,00	0,00	0,30	0,30	0,30	0,30	0,30		
Teleorma n	0,00	0,00	0,00	0,00	10,00	10,00	9,80	9,80	9,80		

Source: South Muntenia Region, Social and Economic Indicators 2000-2006, INS, DRS, Călărași, 2008. Anuarul Statistic al României (Romania's Statistic Directory), INS,2007, 2008, 2009.

- concerning the upgraded roads, expressed in percents from total, one can notice that for the four Danubian counties the upgraded roads in 2000 represent between 32.70 % and 34.60%, and in 2008, they represent between 34.5 and 56.30 %, and the weight of upgraded roads in the total number of national roads varies between 86.80% in 2000 and 99.00% in 2008; - in 2006, the lightweight blanket roads at the level of the South-Muntenia Region hold 3.40 % of the total national roads; in the case of the four analyzed counties, the variations range between 0.3 and 13.20 %.

To be noted that in the period between 2000 and 2006 there was a significant development of the roads network towards the superior categories. Also, one may add the fact that the degree of modernization of these roads is very different on counties and areas. The entire regional roads network includes the national roads, whose quantum is slightly inferior to the upgraded ones. The density of public roads per 100 sqkm of territory for the South-Muntenia development Region is differentiated (there are rural localities which do not have cobbled or paved roads). We make this statement because the tendency of every tourist is to drive by means of own vehicle from the place of residence to the agritourism unit (household/pension).

### 2. The structure of the inhabitable capacities and the infrastructure of houses' endowments in the rural environment in the Danubian area of the South-Muntenia Region

An issue of great importance in the rural tourism/agritourism development is the rural residence, as its level of endowment and modernization is considered the main element in attracting tourists. The references to the water and natural gas supply, the existence of a sewerage network etc., presented via adequate indicators stress agritourism appeal elements, but also the living conditions and village civilization.

Therewith, the characteristics of this house delimitate the functional classification of the rural settlements. For this, within the area of the analyzed Danubian region is required to consider a variety of elements as close as possible to the reality of the necessary resources, referring to certain territorial criteria, and specifically to their use. *Table 2* renders the number of houses per 1000 inhabitants in the period between 2000 and 2008, which underlines the following aspects:

Table 2. The evolution of the number of houses per1000 inhabitants in the period between 2000 and 2008

Conty/ region		2000	2001	2002	2003	2004	2005	2006	2007	2008
Total region	No/ 1000 Inhab.	355	371	374	377	380	382	384	387	390
	%	100, 0	1,0 4	1,0 5	1,0 6	1,0 7	1,0 7	1,0 8	1,0 9	1,0 9
Călărași	No/ 1000 Inhab	339	354	360	362	364	366	366	368	371
	%	100, 0	1,0 4	1,0 6	1,0 6	1,0 7	1,0 7	1,0 7	1,0 8	1,0 9
Ialomița	No/ 1000 Inhab	340	358	363	365	367	369	371	373	377
	%	100, 0	1,0 5	1,0 6	1,0 7	1,0 7	1,0 8	1,0 9	1,0 9	1,1 0
Giurgiu	No/ 1000 Inhab	369	370	379	383	384	387	389	391	393
	%	100, 0	1,0 0	1,0 2	1,0 3	1,0 4	1,0 4	1,0 5	1,0 5	1,0 6
Teleorman	No/ 1000 Inhab	367	380	381	386	392	397	400	404	410
	%	100, 0	1,0 3	1,0 3	1,0 5	1,0 6	1,0 8	1,0 8	1,1 0	1,1 1

Source: South-Muntenia Region, Social and Economic Indicators 2000-2006, INS, DRS, Călărași, 2008. Anuarul Statistic al României (Romania's Statistic Directory), INS,2007, 2008, 2009.

-At the level of the entire South-Muntenia Region the number of houses per 1000 inhabitants in 2000 was of 355 and in 2008 it reached 390, having a constant increasing tendency;

-Concerning the four Danubian counties, for the same period, 2000 to 2008, is noticed the same increasing trend for this number of houses, but with differences between the counties; so, in Călăraşi and Ialomița, the level of this indicator is below the average of the region and in Giurgiu and Teleorman counties, the number of these houses is above the South-Muntenia Region

The quality aspect is still relevant, regarding the utilities in these houses. In *table 3* are rendered a few representative coefficients of the quality aspect in the endowment of houses. For 2007, the following may be significant:

- regarding houses, one notices that the number of finished houses is 53 in Teleorman county and 323 in Călărași county; there are also differences between counties regarding the useful built surface of the houses;

- regarding the water supply, one notices that the number of localities with water supply network is of only 15 in Giurgiu county and 61 in Călărași county. Regarding to the same system of utilities, one may state that the total simple length of the distribution network ranges between 349 km in Teleorman county, 573 km in Călărași county and 3084 km în in Giurgiu county. As for the total quantity of water distributed, studies show that the highest level is in Teleorman county and the lowest level is in Călărași county;

Table 3. The situation of houses and their endowments (water, sewerage) in the rural area of the Danubian counties in the South-Muntenia Region

Finished houses								
Counties	Total (no.)	Built surface (sqm)	Useful surface (sqm)	Inhabitable surface (sqm)				
Total	808	99582	85484	48655				
Teleorman	53	8264	5883	3863				
Giurgiu	187	33559	26823	18928				
Călărași	323	32423	32859	13410				
Ialomița	245	25336	19919	12454				
Water and natural gas supply								
Counties	Localities with water supply (no.)	Total simple length of the network (km)	Fresh water distributed (thousand cubic m)	Localities with sewerage systems (no.)				
Total	137	4578	18950	8				
Teleorman	20	349	10016	6				
Giurgiu	15	3084	4721	1				
Călărași	61	573	1713	1				
Ialomița	41	572	2500	0				

Processed using: Anuar Statistic al Județelor: Călărași, Ialomița, Giurgiu, Teleorman, (Statistic Directory of Călărași, Ialomița, Giurgiu, Teleorman Counties) 2007, INS, DJS

\*) – the data for Giurgiu county only refers to total per county.

- there are only 6 localities with sewerage systems in Teleorman county, and only one in each of the counties Giurgiu and Călăraşi.

Regarding the building of these houses, one can show that the majority of the houses and residential buildings in the rural area of the region are funded by the population's own funds. The performance corresponds to the authorization norms in force. As for the finished houses, an analysis from the quarterly structural schedule point of view reveals that the performance of construction works begins most of the times in the second quarter and ends in the fourth quarter or even the next year.

The unique offers for agritourism products/services which can be considered as one of a kind in the South-Muntenia Region, are the result of some market policies, which according to these rural tourism/agritourism products fit the in advantages of a strategy created by the conditions and the heritage of the area.

This can lead to the conclusion that as for the inhabitable capacities, they are enough from a quantity point of view, both now and in the future. Where the qualitative side is concerned, being interpreted by the degree of comfort, it is still considered that there is a low or sometimes very low level of quality. We refer to the fact that this degree of comfort does not respond to the expectations of the tourists from urban areas and especially from foreign countries.

The analysis of this assembly of situations, the existence and functionality of urbanistic comfort utilities reveals that all these may still be impediments. This may be true, as the volume and structure of these existing utilities the rural area of South-Muntenia in Region Development still show underprivileged elements for the potential tourist. We mainly refer to the weight values, which are still low for the situation of the counties. There is an insufficient development and a high degree of wear of the physical and urbanistic infrastructure. Even areas with heavy traffic, where they offer a series of advantages in transports, need investments to complete the current infrastructure as the actual available funds are insufficient compared to the requirements.

## CONCLUSIONS

This study lead to conclusions related to the implications of road transport routes' structure and the inhabitable capacities, the infrastructure of the houses' endowment in the Danubian rural area of the South-Muntenia Region, in the Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol.12, Issue 3, 2012 PRINT ISSN 2284-7995 e-ISSN 2285-3952

conditions of developing the agritourism activities.

1.- The rural territorial infrastructure is a support of the rural tourism economy in the Danubian area of the South-Muntenia region. This is considered a resultant of the agritourism programs referring to means of communication, public utilities, buildings etc., with their different upgraded types in the rural area.

2.- The structure of road transport routes, is related and conditions the types of tourism in general, especially because of the transport issue. For this Danubian area as well, the most important is the road transport, and for that there is always the issue of developing this transport network. One can refer to the following: the density of public roads which has a tendency to increase; the upgraded roads which have a weight of 86.8% to 99.00% in the analyzed area; the lightweight blanket roads which vary between 0.3% and 13.20% at the territorial level of the counties.

Also, one can add the fact that the modernization degree of these roads is very different between the counties and areas. The total regional roads network includes national roads whose quantum is slightly inferior to upgraded roads. The density of public roads per

100 sqkm of territory is differentiated for the South-Muntenia Development Region (there are rural localities which do not even have cobbled or paved roads).

3.- The structure of the inhabitable capacities and the infrastructure of houses' endowments in the rural environment in the Danubian area of the South-Muntenia Region, is a very important issue due to the fact that its degree endowment modernization of and is considered the main element in attracting tourists. The referrals to the water and natural gas supply, the existence of a sewerage system etc., presented by the adequate indicators stress the agritourism attractive elements, but also stress the life conditions and village civilization.

As for the use of houses, rendered by the number of houses per 1000 inhabitants in the period between 2000 and 2008, the analysis showed that the number of houses is increasing, and in Giurgiu and Teleorman counties the number of these houses exceeds the average of the South-Muntenia Region.

The analysis of the *quantitative aspect* was focused on the existence of utilities in these houses from the counties taken into study. It showed that a) the number of finished houses is of 53 in Teleorman county and 323 in Călărași county (the amplitude regarding the useful inhabitable built surface, underlines the same counties; b) the number of localities with waper supply networks - the total simple length of the water distribution network is between 349 km in Teleorman county, 573 km in Călărași and 3084 km in Giurgiu county. As for the total quantity of water distributed, it shows that in Teleorman county is registered the highest level, and in Călărași county the lowest; c) there are only 6 localities with sewerage systems in Teleorman county and one in each of the counties: Giurgiu and Călărasi.

We can also mention that most of these houses are funded by the population. It is relevant that the construction works begin in the second quarter of the schedule and are finished in the fourth quarter or even the next year.

In discussing the *qualitative side*, it has been interpreted by the degree of comfort and one can conclude that there still is a low and even very low level of quality. We refer to the fact that this degree of comfort is not at the level of the tourists' demand, who usually come from urban areas and especially from abroad. There is an insufficient development and a high degree of wear both of the physical and urbanistic infrastructure. Even the areas with heavy traffic, where they offer a series of transport advantages, need investments to complete the existent infrastructure, as the available are insufficient actual funds compared to the requirements.

All these public units and individual houses of the rural area represent a very important motivational request for the agritourism appeal in this area.

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