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STUDY ON TOURISM PLANNING IN PRAHOVA COUNTY BY TOURIST TRAFFIC ANALYSIS

Adelaida Cristina HONTUŞ

University of Agronomical Sciences and Veterinary Medicine - Bucharest, Faculty of Management, Economical Engineering in Agriculture and Rural Developments, 59, Mărăşti Boulevard, District 1, Bucharest, Cod 011464, Romania, E-mail: adelaidahontus@yahoo.com

Corresponding author: adelaidahontus@yahoo.com,

Abstract

According to some assessments related to imaging in tourism can conclude that tourist satisfied, satisfied where he spent the holiday by sending information, their value can influence other five potential tourists to spend in the future vacation stay on site, while unhappy with the quality of tourist services especially tourism staff, ten influence potential tourists. Tourism can provide an important component of a strategy for community development and economic development in an area. If an area has natural attractions important, certain historical sites or cultural, sports, facilities for special events and other similar goods, the tourist promotion of an area can attract more visitors, potential tourists in the community who will spend time and spend money to access these benefits. To better promote the county Prahova and existing attractions in the area, we performed an analysis of tourist traffic on tourism demand and supply by calculating the most representative tourism indicators: average daily number of tourists, number of overnight stays, average length of stay, tourist traffic density and the coefficient of utilization of the accommodation capacity and other indicators features. The statistics were taken from NIS, Statistical Yearbook of Bucharest and Prahova and statistically processed and interpreted.

Key words: *touristic attractiveness, tourism indicators, tourist movement,*

INTRODUCTION

Basic services are the tourism accommodation, food, treatment and sports. They have a decisive role in the movement and stay of tourists. Therefore, an overnight accommodation and leisure tourist ensures a certain period of time, determined on the basis of prices that vary depending on comfort and season [1].

Tourism could be developed in an area only if there are enough possibilities for accommodation and leisure visitors. Regardless of time and degree of comfort, accommodation is an essential element in ensuring the conditions for a comfortable stay for tourists arriving in resort and for other participants. Generally, housing in its structure [2]:

-commercial component: hotel, restaurant;

-non-commercial sector: second homes, accommodation offered by the educational system, religious groups.

Based on Prahova Valley accommodation includes classical forms (villas and hotels), but also modern forms (inns, tourist stops, cottages, camping sites, holiday camps, cottages, guesthouses) [3].

The county Prahova intersect the parallel of 45 ° latitude and the meridian of longitude 26o East, a point located near Ploiesti, in Blejoi locality. The total area of Prahova County is 4,716 km^2, which represents about 2% of the country.

Located in the southern Carpathians, Prahova County is conducted NNW-SSE direction, being limited to the north of Braşov County, east of Buzău county, west and south of the county of Dâmboviţa and Ialomiţa county Ilfov County [4]. It is crossed by the parallel 45 ° and 26 ° meridian.

Ploiesti is the county seat. Other urban centers are: the Municipality Câmpina and the towns: Azuga, Logs, Sinaia, Comarnic, Breaza, Băicoi, Boldeşti- Scăieni, Urlaţi, Mizil, Slănic Plopeni and Vălenii de Munte [12].

Opportunities for development of tourism activity are determined both by tourism potential and geographical position of the county, which is crossed by European road

E60 and a dense network of roads, Ploiesti is situated at the crossroads of numerous links directions north-south (Bucharest - Ploiesti - Braşov, Bucharest - Ploieşti - Vălenii de Munte - Săcele) and east - west (Buzău - Ploieşti - Târgovişte). Also electrified double track Bucharest - Braşov and the proximity of the capital county ensures a very high accessibility [3].

Prahova county tourist accommodation units are concentrated in the Prahova Valley (Sinaia and logs cities hold 58% of the total accommodation places) and in the city of Ploieşti. The accommodation area and Slănic Prahova Teleajen are underrepresented, are located mainly in Slănic Prahova localities, and key Măneciu (12% of total seats).

In terms of tourist arrivals it is not their constant evolution, presenting important variations over the past few years.

MATERIALS AND METHODS

This paper is based on an analysis of tourism demand and supply in Prahova County, the degree of capitalization of the tourist mountain areas in Romania. The study conducted research consists of studying and analyzing statistical data on tourist traffic in this county tourist density relative to the number of inhabitants and county area.

The objective of this study is analysis of tourist traffic in Prahova County, so we can determine whether promotion and tourist services can be improved. To carry out this research, we used a series of documents provided by Prahova County Council for Tourism, as well as statistics on the number of tourists in the area made available by the National Institute of Statistics.

For tourist traffic analysis we calculated the following indicators of tourism demand and supply at the county level, namely: *Index of global tourist demand change, Index of domestic and foreign demand variation in time, Indicator of total accommodation capacity evolution, Index of global tourist demand distribution, Index of customer evolution, Index of overnight stay evolution, The evolution of the average length of stay, The evolution of the average length of stay, Customer occupancy indicator, The monthly concentration coefficient, Tourist density indicator in relation to population density and Tourist density indicator in relation.* Analysis and interpretation of these indicators of tourist traffic helps us see which is the development of tourism in Prahova County and what strategies and planning of tourism development may be taken in this area.

RESULTS AND DISCUSSIONS

Tourism demand and supply indicators in the County Prahova

Table 1. Indicators regarding tourism demand and supply in the Prahova County

Indicators	2009	2010	2011	2012	2013
No. total Overnights	816,753	799,048	839,230	909,557	876,902
No. Total Overnights Romanian	683,922	664,127	693,296	762,198	747,857
No. Total foreign Overnights	132,831	134,921	145,934	147,359	129,045
Nr. Romanian tourists	285,505	273,433	290,331	324,333	317,693
No. Foreign tourists	44,169	45,377	45,645	48,111	48,583
No. total tourists	329,674	318,810	335,976	372,444	366,276
No. Total accommodation places in hostels in the Prahova County	1,392	1,397	1,648	1,607	1,897
No. Total places in the Prahova County	9,465	9,906	10,319	11,114	12,044
Population in Prahova County	836,146	833,823	830,370	826,511	821,879
Prahova County Area (km^2)	4,716	4,716	4,716	4,716	4,716

Source: Statistical Yearbook of the County Prahova, INSSE, Bucharest, www.insse. [11, 13, 15]

We analyzed the following indicators of tourism demand and supply:

1). *Index of global tourist demand change*:
Ct = (No. Overnights current year / no. Overnights previous year) * 100

$$\Delta CG_{0-i} = \frac{CG_i}{CG_0} \cdot 100 \text{ [5,6,7]}$$

The calculations above we can see that tourism demand has exceeded 100% in 2011 and 2012, with the exception of 2010 and 2013 when he suffered a decrease of approximately 3.5%. The maximum percentage increase is 10.85% in 2012.

Table 2. Index of global tourist demand

Indicators	2009	2010	2011	2012	2013
No. total tourists	329,674	318,810	335,976	372,444	366,276
ΔCG		96.70%	105.38%	110.85%	98.34%

Source: www.insse.ro and own processing

2. ***Index of (Romanian and foreign) demand variation in time***

Ici = [No. Romanian tourists per current year / (No. Romanian tourists + No. Foreign tourists) current year]*100

Ice = [No. Foreign tourists per current year / (No. Romanian tourists + No. Foreign tourists) current year]*100

$$\Delta CI_{0-i} = \frac{CI}{CG} \cdot 100;\ \Delta CE_{0-i} = \frac{CE}{CG} \cdot 100 \quad [5,6,7]$$

Table 3. Internal tourism demand

Indicators	2009	2010	2011	2012	2013
No Romanian tourists	285,505	273,433	290,331	324,333	317,693
Total tourists	329,674	318810	335,976	372444	366,276
ΔCI	86.602%	75.767%	86.414%	87.082%	86.736%

Source: www.insse.ro and own processing

Distribution of domestic tourism demand overall had a constant evolution in the period under review and stood at about 86%. Internal global tourism demand fell the most in 2010 (21%).

Table 4. International tourism demand

Indicators	2009	2010	2011	2012	2013
No. foreign tourists	44,169	45,377	45,645	48,111	48,583
No. total tourists	329,674	318,810	335,976	372,444	366,276
ΔCE	13.398%	14.233%	13.586%	12.918%	13.264%

Source: www.insse.ro and own processing

From the above analysis it can be seen that the highest number of tourists coming in Prahova county are Romanian. The number of foreigners is increasing in 2009-2013, but the distribution of foreign tourism demand has fluctuated in the period under review.

3. ***Index of (domestic and foreign) demand variation in time*:**

Ici = (No. Romanian tourists per current year / No. Romanian tourists per previous year)*100

Ice = (No. Foreign tourists per current year / No. Foreign tourists per previous year)*100

$$ICE_{0-i} = \frac{CE_i}{CE_0} \cdot 100 \quad ICI_{0-i} = \frac{CI_i}{CI_0} \cdot 100 \quad [5,6,7]$$

Internal tourism demand [8]:

Table 5.The indices of national tourism demand

Years	2009	2010	2011	2012	2013
No. Romanian tourists	285,505	273,433	2903,31	324,333	317,693
ICI		95,772%	106,180%	111,712%	97,953%

Source: www.insse.ro and own processing

Variation in demand for domestic tourism grew in 2012 by 11%, while between 2013 decreased by approximately 4%.

Foreign tourism demand:

Table 6. The indices of international tourism demand

Years	2009	2010	2011	2012	2013
No. foreign tourists	44,169	45,377	45,645	48,111	48,583
ICE		102.735%	100.591%	105.403%	100.981%

Source: www.insse.ro and own processing

Variation in demand for foreign tourism increased in 2012 by approximately 5%.

4. The ***average length of stay*** [9] for each accommodation facility, the number of days is replaced by the number of overnight stay registered in the accommodation records, as follows:

$$S_H = \frac{NH}{T} \text{ (days)} \quad [5,6,7]$$

where: NH - number of recorded overnight stay;

T - number of tourists arriving;

S_H - average stay in the hotel.

Total average stay = Nr. Total overnight stays (foreign + Romanian) / No. Total Tourists (Romanian + foreign)

Hotels

Table 7. Overnights and average stay in hotels

Indicators	2009	2010	2011	2012	2013
No. Total Overnights hotels / County	599,541	590,315	642,675	692,418	645,834
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	1.819	1.852	1.913	1.859	1.763

Source: www.insse.ro and own processing

The average stay in hotels recorded the highest value in 2011 (1.913 touristic days) and the lowest value in 2013 (1.763 touristic days)

Hostels

Table 8. Overnights and average stay in hostels

Indicators	2009	2010	2011	2012	2013
No. Total Overnights hostels / County	3,114	5,647	6,894	19,606	24,415
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.009	0.018	0.021	0.053	0.067

Source: www.insse.ro and own processing

The average stay in hotels recorded the highest value in 2013 (0.067 days of interest) and the lowest value in 2009 (0.009 days of interest).

Motels

Table 9. Overnights and average stay in motels

Indicators	2009	2010	2011	2012	2013
No. Total Overnights motels / County	38,101	41,092	32,429	34,863	27,836
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.116	0.129	0.097	0.094	0.076

Source: www.insse.ro and own processing

The average stay in motels recorded the highest value in 2010 (0.129 days of interest) and the lowest value in 2013 (0.076 days of interest).

Villas

Table 10. Overnights and average stay in villas

Indicators	2009	2010	2011	2012	2013
No. Total Overnights villas / County	42,630	46,418	40,881	38,869	50,407
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.129	0.146	0.122	0.104	0.138

Source: www.insse.ro and own processing

The average stay in the villas of the highest value recorded in 2010 (0.146 days of interest) and the lowest value in 2012 (0.104 days of interest).

Chalets

Table 11. Overnights and average stay in chalets

Indicators	2009	2010	2011	2012	2013
No. Total Overnights chalets / County	23,280	16,123	11,095	10,436	9,774
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.071	0.051	0.033	0.028	0.027

Source: www.insse.ro and own processing

The average stay per chalets the highest value recorded in 2009 (0.071 days of interest) and the lowest value in 2012 (0.028 days of interest).

Boarding houses

Table 12. Overnights and average stay in boarding houses

Indicators	2009	2010	2011	2012	2013
No. Total Overnights boarding houses / County	76,067	69,636	76,250	76,254	75,750
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.231	0.218	0.227	0.205	0.207

Source: www.insse.ro and own processing

The average stay in boarding houses recorded the highest value in 2009 (0.231 days of interest) and the lowest value in 2012 (0.205 days of interest).

Rural locations

Table 13. Overnights and average stay in rural locations

Indicators	2009	2010	2011	2012	2013
No. Total Overnights rural location / County	19,924	13,861	14,920	20,195	26,632
No. Total Tourists / County	329,674	318,810	335,976	372,444	366,276
S (travel days)	0.060	0.043	0.044	0.054	0.073

Source: www.insse.ro and own processing

The average stay in rural locations recorded the highest value in 2013 (0.073 days of

interest) and the lowest value in 2010 (0.043 days of interest).

5. Monthly traffic coefficient is calculated as a ratio between the number of tourists in month with maximum traffic *(LM)* and the number of tourists in month with minimum traffic *(lm)* [10]

$C_{monthly} = \frac{LM}{lm}$, where $C_{monthly} \geq 1$

C monthly : 40257/23466 = 1.715

Table 14. Monthly tourist traffic

Indicators	Month August 2013	Month April 2013
No. Total tourists/county	40,257	23,466
C monthly traffic	1.715	

Source: www.insse.ro and own processing

Monthly tourist traffic coefficient recorded a value of 1.715.

6. The monthly concentration coefficient is calculated by dividing the number of tourists recorded during the highest-traffic month by the total number of tourists during a year A_t.

Cc = [No. Tourists per each month / (No. Romanian tourists + No. Foreign tourists) per year of calculation]*100

$$C_c = \frac{LM}{A_t} \text{ [5,6,7]}$$

Table 15. The monthly concentration coefficient

Indicators / months of the year	Nr. total tourists / month	Nr. Total tourists / 2013	Cc
January	28,449	366,276	0.078
February	28,038	366,276	0.077
March	25,355	366,276	0.069
April	2,3446	366,276	0.064
May	29,678	366,276	0.081
June	31,086	366,276	0.085
July	33,793	366,276	0.092
August	40,257	366,276	0.110
September	32,279	366,276	0.088
October	30,943	366,276	0.084
November	30,719	366,276	0.084
December	29,460	366,276	0.080

Source: www.insse.ro and own processing

The Monthly concentration coefficient for each month had recorded the highest value in August with a value of 0.110 tourists, and in April recorded the lowest value of 0,064 tourists.

7. Share of hotel (B&B) capacity out of total accommodation capacity on County

$$Icc = \frac{LC}{LH} \cdot 100 \text{ [5,6,7]}$$

where: *LH* - Total number of accommodation places in the county;

LC - total capacity of accommodation in hostels / county;

Table 16. The share of hostels accommodation capacity in the total accommodation capacity

Indicators	2009	2010	2011	2012	2013
The total capacity of accommodation in hostels / county	1,392	1,397	1,648	1,607	1,897
The total capacity of accommodation / county	9,465	9,906	10,319	11,114	12,044
Icc	14.707%	14.103%	15.971%	14.459%	15.751%

Source: www.insse.ro and own processing

Accommodation capacity share of pensions in total accommodation capacity in the county, the highest value in 2011 and 2013 by about 16%.

8. Indicator of total accommodation capacity evolution between „0" and „i"

I_{LC} = (No. beds per current year / No beds per previous year)*100

$$\Delta LC_{0-i} = \frac{LC_i}{LC_0} \cdot 100 \text{ [5,6,7]}$$

Table 17. Local accommodation capacity indices

Indicators	2009	2010	2011	2012	2013
Total capacity accommodation/ county	9,465	9,906	10,319	11,114	12,044
ΔLC		104.659 %	104.169 %	107.704 %	108.368 %

Source: www.insse.ro and own processing

Total accommodation capacity grew by about 8% in 2013 no significant dips during this period from 2009 to 2013.

9. Index of overnight stay evolution:

I_N = (No. overnight stay per current year / No. overnight stay per previous year)*100

$$\Delta N = \frac{NH_i}{NH_0} \cdot 100 \text{ [5,6,7]}$$

Table 18. Indices of overnights stay

Indicators	2009	2010	2011	2012	2013
No. total overnight stay /County	816,753	799,048	839,230	909,557	876,902
ΔN		97.832%	105.029%	108.380%	96.410%

Source: www.insse.ro and own processing

Index evolution of overnight stays increased by about 8% in 2012, and in 2010 decreased by 3%.

10. Hotel occupancy indicator

Reflects the use of supply for a given period of time, i.e. hotel activity depending on its capacity [8,9,10]:

Cuc = [No. overnight stays (no. tourist days) / (No. beds * no. days running)] * 100

$$G_0 = \frac{NH \cdot 100}{LH \cdot Z} = \frac{NT \cdot S}{LH \cdot Z} \cdot 100 \text{ [5,6,7]}$$

where:

G_o - occupancy, percentage;

NH - number of overnight stays;

LH - number of beds in hotels;

Z - number of supply days = 365 days;

NT - number of tourists;

S - average length of stay.

Table 19. Hotel occupancy indicators

Indicators	2009	2010	2011	2012	2013
No. Total overnight stays / county	816,753	799,048	839,230	909,557	876,902
No. Total beds / county	9,465	9,906	10,319	11,114	12,044
No. travel days	365	365	365	366	365
Occupancy (%)	23.642%	22.099%	22.282%	22.360%	19.947%

Source: www.insse.ro and own processing

Hotel occupancy recorded in 2009-2013 decreases in occupancy from 23.6% in 2009 to 19.95% in 2013.

11. Tourist density indicator in relation to population density

$$D_{t_{i-0}} = \frac{T_{t_{i-0}}}{Population} \quad \textbf{(tourists/ no. inhabitants)}$$

[5,6,7]

where:

T_{i-0} *– no. total Romanian + foreign tourists;*

Pop - County population

Table 20. Tourist density

Indicators	2009	2010	2011	2012	2013
No. Total tourists / county	329,674	318,810	335,976	372,444	366,276
county population	836,146	833,823	830,370	826,511	821,879
Dt (tourists / No. Inhabitants)	0.394	0.382	0.405	0.451	0.446

Source: www.insse.ro and own processing

Tourist traffic density in relation to population recorded the highest value in 2013 (0.446 tourists / No. Inhabitants) and lowest value (0.0382 tourists / No. Inhabitants) was registered in 2010.

12. Tourist density indicator in relation to area

$$D_{t_{i-0}} = \frac{T_{t_{i-0}}}{Surface} \quad \textbf{(tourists/km}^2\textbf{)} \quad \text{[5,6,7]}$$

where:

T_{i-0} *– no. total Romanian + foreign tourists;*

S - town/village (county) area.

Table 21.Tourist density in relation to area

Indicators	2009	2010	2011	2012	2013
No. Total tourists / county	329,674	318,810	335,976	372,444	366,276
county area	4,716	4,716	4,716	4,716	4,716
Dt (tourists / km^2)	69.905	67.602	71.242	78.975	77.667

Source: www.insse.ro and own processing

Tourist traffic density in relation to surface county recorded the highest value in 2012 (78.97 Tourists / km^2) and the lowest value was recorded in 2010 (67.60 tourists / km^2).

CONCLUSIONS

Analysis of the situation in tourism revealed that Prahova County has a tourism potential outstanding in terms of variety, density and importance of both natural attractions and cultural goods, and tourism infrastructure special but big disparities between different tourist areas bounded across the county. Thus we can say:

A first conclusion is the fact that Prahova County has a huge tourism potential but is poorly capitalized.

Preserving cultural heritage could go hand in hand with tourism development, but careful

monitoring is needed to ensure the maintenance of high standards of conservation.

A second conclusion is related to poor promotion of tourism potential that, over the last twenty years has made sporadic times chaotic, without a spectacular result, only small temporary results. So, by promoting sustainable tourism fairs nationwide through media and promotional materials bear in mind this objective.

Tourism can be an important source of income to achieve, but it requires investment.

There is thus a circle in which revolve endlessly two important factors:

- Achieving quality in tourism services to attract visitors;
- Investment measure to have what attracts them.

If these factors are made, then we can say that tourism is a source of continuous income.

In this context, a third finding may be related to the behavior of the offering tourism services in terms of fairness and solicitude, it is crucial to create a positive image of the tourist destination.

Focusing primarily of tourism facilities in the Prahova Valley and capitalization insufficient potential they hold other tourist areas, decreased occupancy accommodation capacity and diversification and insufficient promotion of tourism are the main issues that are considered when setting targets for tourist arrangement of an area.

Given that tourism is considered that, as the economic activity can be one invigorating for the entire Romanian economy, I think this analytical study is just a response to the need of information that must travel to and from the tourism sector. A prime tourist area as the Prahova County comes to emphasize the need for such research and statistical analysis, just the desire to combine in a most effective tourism supply with demand.

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