ANALYSIS OF TOURISTY MOVEMENT IN NEAMŢ COUNTY

Cristina Simeanu[1], B. Păsărin [1], D. Simeanu[1], B.V. Avarvarei[1]

[1]*University of Agricultural Sciences and Veterinary Medicine Iasi, Romania*

Abstract

The structure of tourism movement in Neamţ County during 2012–2016, indicate a low rate of foreigner tourists (6.94%) from the total entrances in the county, number of days/tourist for foreigner tourists have also a low rate (6.98%). Mean level of tourists recorded 177.928 thousands persons. The mean level of number days/tourist recorded a value of 335.788 thousands persons. Average duration of the sojourn had fluctuations during analysed period (2012–2016) being of 1.88 days for Romanian tourists and for the foreigner ones. Gross utilization rate of touristy accommodation capacity recorded fluctuant values in those 5 analysed years (2012–2016), in 2016 being recorded the highest value 21.00%. From the analysis of touristy movement could be observed a growth of dynamic rate for tourists' number, per total mean dynamic rate show an increase, in average, with 1.112. The absolute average modification of tourists' number recorded 19.47 thousands persons. Average dynamic rhythm for tourists' number was 11.20%.

Key words: entrances, overnight stays, mean duration of sojourn, gross utilization rate of touristy accommodation capacity, dynamic rate

INTRODUCTION

Neamţ County is one of mountain counties from Moldova situated in the NW part of the province and on the way which, along Bistricioara valley, connects Transylvania with Moldova.

Touristy potential of Neamţ County is given by the relief which is mainly mountainous, formed by high massifs (over 1700 m and even over 1900 m) lined up between affluent, on the right side of the longitudinal Bistriţa valley (*Dornele, Budacului, Ceahlãului* massif); and by a single lower peak, with flat back, on the left side of the same river, (*Stãnişoara*). At the east of mountainous area are Sub-Carpathians hollows *Nemţişor* and *Cracãu*, then *Sub-Carpathians*, which rise in the N of county at over 900 m (*Pleşului* hill) and in S decrease and are divided by affluent of Bistriţa, Moldova, Siret.

Capitalization of an area touristy potential could be synthetic expressed by some statistical indicators such as: touristy boarding capacity, arrivals (number of tourists) and overnights (days/tourist) [4], [5], [6], [7].

The development of tourism and its integration in the structure of modern economies, in sphere of population necessities and consumption, is reflected into a continuous enrichment of its content and by a diversification of manifestation forms. Participation of touristy movement of larger social categories, associated with demands' variety, was favourable to apparition of new forms of tourism, their adaptation being permanent to tourists' requirements and travelling conditions. Increasing of tourism role in the ensemble of international relations as well as in economic and social life determined enlarged preoccupations for evaluation of its dimensions and effects, for elaboration of a unitary system for recording and tracking of touristy flow [3].

MATERIAL AND METHOD

Touristy boarding structure with functions for touristy accommodation is represented by any building or construction, which provides permanently or seasonally an accommodation service or any other specific services for

tourists. There aren't included in the statistical research, the touristy boarding structure with functions of touristy accommodation with an installed accommodation capacity less than 5 places [9].

The existent touristy accommodation capacity (installed) represent the number of accommodation places for touristy usage registered in the last document for reception, homologation and classification of the touristy accommodation unit, exclusively supplementary beds which could be installed in case of necessity. The places afferent to structures of touristy accommodation with function of complementary touristy boarding (small houses, camping, etc.) to a basic touristy boarding structure (hotel, motel, camping etc.) and utilisation of those places are included in the basic structure [9].

Touristy accommodation capacity in function represent the number of boarding places available for tourists and provided by the touristy units, taking in account the number of days in which the unit is opened into a certain period of time. It is expressed in places/day. Are excluded places from rooms or units temporary closed due to the lack of tourists, for improvements or by any other reasons [9].

In number of tourists (arrivals) accommodated in touristy boarding units are included all the persons (Romanians and foreigners) who travel outside their own residence locality, for a period less than 12 months and who stay at least one night into a touristy boarding unit in areas which they visit in the country; the main reason of the journey being other than to have a paid activity in the visited [9].

Number days/tourist (touristy overnight) is a 24 hours period, starting with hotel hour, for which a person is recorded in the bookkeeping of touristy unit and it is hosted for the paid price, even if effective sojourn stay is lower than the mentioned period. Are also included the overnights afferent to supplementary installed beds (paid by customers) [9].

Mean duration of sojourn is determined by rate between numbers of days/tourist (NTZ) to tourists number (T) and reflects the possibility of touristy offer to retain a tourist into a certain area, region or country [1].

$$D_s = \frac{\sum NZT}{\sum NT}$$

where: D_s - mean duration of sojourn;

NZT - numbers of days/tourist;

T - tourists number.

Utilisation index of functional touristy capacity is calculated by rate between numbers of realised overnights at functional touristy capacity from a certain period [9].

$$I_n = (N/C_f) \times 100$$

where: I_n – utilisation index of functional touristy capacity;

N – number of overnights recorded into a certain period of time;

C_f – functional touristy capacity.

Absolute indicators represent a basic form of dynamic series, based on which could be obtained general indicators [2].

Level indicators are the terms of a series formed by absolute indicators ($y_1…y_t….y_{t-1}$).

Total level of terms ($\sum_{t=1}^{n} yt$), only for time interval series with absolute measures.

The absolute modifications
- with fixed base ($\Delta_{t/1}$)

$$\Delta_{t/1} = y_t - y_1 \quad \text{where, t=2,n}$$

- with in chain base (mobile or variable base) ($\Delta_{t/t/1} = y_t - y_{t-1}$)

$$\Delta_{t/t/1} = y_t - y_{t-1} \quad \text{where, t=2,n}$$

Relative indicators

It is a presentation way, mainly percentage. In this situation is mandatory that in title or outside the table to be mentioned the rating based so the data interpretation to be correctly done.

Dynamic index
- with fixed base ($I_{t/1}$):

$$I_{t/1(\%)} = \frac{yt}{y1} \times 100$$

- with in chain base ($I_{t/t-1}$):

$$I_{t/t-1(\%)} = \frac{yt}{yt-1} \times 100$$

Dynamic rhythm
- with fixed base ($R_{t/1}$):

$$R_{t/1} = I_{t/1(\%)} - 100 \%$$

- with in chain base ($R_{t/t-1}$):

$$R_{t/t-1(\%)} = I_{t/t-1(\%)} -100\%, \quad t = 2,n$$

RESULTS AND DISCUSSIONS

Analysis of touristy offer

Number of touristy units with function of touristy accommodation on types of structures (hotels, hostels, apart hotels, motels, touristy villas, touristy chalets, bungalows, camping, touristy halts, touristy small houses, camps for pupils and preschoolers, touristy boarding houses, agro-touristy boarding houses and accommodation spaces on river and sea vessels) from Neamţ County in those 5 analysed years (2012–2016) (tab. 1) increased in each year, totally being a number of 177 structures in 2012 and 235 touristy accommodation structures in 2016, the most numerous ones being agro-touristy and touristy boarding houses followed by hotels.

Table 1 Touristy boarding structures with touristy accommodation functions on types of structures from Neamţ County in period 2012–2016

Types of touristy boarding units	2012	2013	2014	2015	2016
	MU: Number				
Total	177	213	225	234	235
Hotels	14	17	17	18	17
Hostels	6	6	6	6	6
Apart hotels	1	1	1	1	1
Motels	4	6	6	5	6
Touristy villas	4	7	7	7	7
Touristy chalets	7	7	8	8	7
Bungalows	3	4	5	6	6
Camping	2	2	1	2	2
Touristy halts	4	4	3	3	3
Touristy small houses	2	4	10	9	8
Camps for pupils and preschoolers	2	2	2	2	2
Touristy boarding houses	27	33	34	33	30
Agro-touristy boarding houses	100	119	124	133	139
Accommodation spaces on river and sea vessels	1	1	1	1	1

Source: insse.ro

The existent touristy accommodation capacity on type of touristy boarding units from Neamţ County during 2012–2016 (tab. 2) increased in those 5 analysed years and varied between 5586–7072 places, the highest boarding capacity being founded in agro-touristy boarding houses followed by hotels. The existent boarding capacity function on types of touristy accommodation structures from Neamţ County in the same period of time (2012–2016) (tab. 3) recorded yearly increasing which indicate a good economical situation for tourism in Neamţ County during the analysed period.

In 2016, the existent functional touristy boarding capacity (total) in Neamţ County was of 2041316 places–days with a net utilisation index for functional capacity of 21.00%.

From a comparative analysis of accommodation units' number and number of places in boarding structures in period 2012–2016 from Neamţ County (tab. 4) it could be observed the fact that in 2016 number of boarding units increased from 177 as were in 2012, to 235. In this period increased the number of agro-touristy boarding houses from 100 in 2012 to 139 in 2016, touristy small houses from 2 in 2012 to 8 in 2016 and the number of hotels increased from 14 in 2012 to 17 in 2016.

Quantitative analysis of the structure of boarding units for those 2 years 2012 and 2016 show the fact that in this period the rate of agro-touristy boarding houses in total of units increased from 56.49% to 59.15%. It also increased the rate of touristy small houses from 1.13% in 2012 to 3.40% in 2016, probably due to the investments in this domain.

Table 2 Touristy boarding capacity existent on touristy accommodation structures in Neamţ County during 2012–2016

Types of touristy boarding units	2012	2013	2014	2015	2016
	MU: Places				
Total	5586	6506	6734	7015	7072
Hotels	1704	1970	1957	2035	1980
Hostels	180	181	185	206	194
Apart hotels	38	38	38	38	38
Motels	170	221	221	179	281
Touristy villas	101	147	147	147	149
Touristy chalets	381	380	394	391	364
Bungalows	77	89	103	119	119
Camping	92	92	60	92	92
Touristy halts	118	118	106	106	106
Touristy small houses	46	80	210	204	210
Camps for pupils and preschoolers	352	352	352	340	340
Touristy boarding houses	539	675	714	680	579
Agro-touristy boarding houses	1757	2132	2216	2447	2589
Accommodation spaces on river and sea vessels	31	31	31	31	31

Source: insse.ro

Table 3 Functional touristy boarding capacity existent on types of touristy accommodation structures in Neamţ County during 2012–2016

Types of touristy boarding units	2012	2013	2014	2015	2016
	MU: Places-days				
Total	1620712	1772656	1797278	1844602	2041316
Hotels	546847	618737	606692	655560	669859
Hostels	60410	56974	55554	65746	62466
Apart hotels	9880	4446	6726	4446	3496
Motels	62220	73610	62415	63965	100192
Touristy villas	35286	45457	42643	41737	47013
Touristy chalets	99304	92989	98198	58392	82650
Bungalows	22659	23214	28888	21298	18928
Camping	5460	2760	4320	1860	4620
Touristy halts	11246	8272	8778	6442	12352
Touristy small houses	5352	8646	27148	18842	12862
Camps for pupils and preschoolers	124440	114320	106140	115480	121650
Touristy boarding houses	136517	165163	168066	161155	166169
Agro-touristy boarding houses	497309	554906	576502	626517	736207
Accommodation spaces on river and sea vessels	3782	3162	5208	3162	2852

Source: insse.ro

The most significant increases of accommodation places were recorded in agro-touristy boarding houses where the rate of boarding places increased from 31.45% in 2012 to 36.6% in 2016 and the one of touristy small houses from 0.82% in 2012 to 2.97% in 2016.

Analysis of touristy flow

From the structure of touristy flow in Neamţ County in period 2012–2016 (tab. 5), could be observed that number of foreigner tourists have a low rate (6.94%) in the total arrivals in county, number day/tourist for foreigner tourists have also a low rate (6.98%), and evolution of tourists' number, Romanian or foreigners, increased in the analysed period. Mean level of tourists' number recorded a value of 177.928 thousands persons. Mean level of number of days/tourist recorded a value of 335.788 thousands days/tourist.

Mean duration of sojourn show the average staying period (days) of tourists in accommodation spaces and reflects the possibility of touristy offer to retain the tourist

into a certain area or region [8], presents fluctuations in the analysed period (2012– 2016) being of 1.88 days both for Romanian tourist as well as for the foreigner ones.

Table 4 Comparative analysis of number of boarding units and number of places in touristy accommodation structures with boarding functions in years 2012 and 2016 from Neamţ County

Types of touristy boarding units	2016				2012			
	No. of units	%	No. of places	%	No. of units	%	No. of places	%
Hotels	17	7.23	1980	28.00	14	7.91	1704	30.50
Hostels	6	2.55	194	2.74	6	3.39	180	3.22
Apart hotels	1	0.42	38	0.53	1	0.56	38	0.68
Motels	6	2.55	281	3.97	4	2.26	170	3.04
Touristy villas	7	2.98	149	2.10	4	2.26	101	1.81
Touristy chalets	7	2.98	364	5.15	7	3.95	381	6.82
Bungalows	6	2.55	119	1.68	3	1.69	77	1.38
Camping	2	0.85	92	1.30	2	1.13	92	1.65
Touristy halts	3	1.27	106	1.50	4	2.26	118	2.11
Touristy small houses	8	3.40	210	2.97	2	1.13	46	0.82
Camps for pupils and preschoolers	2	0.85	340	4.81	2	1.13	352	6.30
Touristy boarding houses	30	12.76	579	8.19	27	15.25	539	9.65
Agro-touristy boarding houses	139	59.15	2589	36.61	100	56.49	1757	31.45
Accommodation spaces on river and sea vessels	1	0.42	31	0.44	1	0.56	31	0.55
Total number	235	100	7072	100	177	100	5586	100

Note: calculus after insse.ro

Table 5 Structure of touristy flow on tourists' type in Neamţ County

Years	Arrivals (no. of tourists)			Overnights (no. days/tourist)			Mean duration of sojourn (days)		
	T	FT	RT	T	FT	RT	T	FT	RT
2012	146218	10854	135364	290555	17878	272677	1.99	1.64	2.01
2013	160707	11509	149198	294862	20473	274389	1.83	1.78	1.84
2014	176226	12785	163441	333365	27013	306352	1.89	2.11	1.87
2015	182384	12391	169993	331502	25767	305735	1.82	2.08	1.80
2016	224105	14220	209885	428658	26023	402635	1.91	1.83	1.92

Note: T – total; FT – foreigner tourists, RT – Romanian tourists
Source: calculus after insse.ro

Index for net utilisation of functional touristy boarding capacity (tab. 6) which express the relation between functional boarding capacity and its effective utilisation by tourists (overnights), (into a certain period) recorded fluctuant values in those 5 analysed years (2012–2016), in 2016 being recorded the highest value 21.00%.

From analysis of touristy flow (tab. 7) we could observe an increasing of dynamics index for tourists' number, per total mean dynamics index show an average increase of 1.112. This increase may have a cause in the economical power of the area which determine a more and more highly interest of tourists for the area.

Mean number of tourist was 177.928 thousands persons.

Mean absolute modification of tourist number recorded 19.47 thousands persons.

Mean dynamics index for tourist number was 1.112 or 111.20%.

Mean dynamics rhythm for tourist number was 11.20%.

Totally the mean number of tourists in Neamţ County in period 2012–2016 was of 177.928 thousands persons, with an absolute mean increase of 19.47 thousands persons. Mean dynamics index show a relative increase of 111.20% and a mean rhythm of 11.20%.

Table 6 Touristy boarding capacity and activity in Neamţ County

Years	Capacitate de cazare		Arrivals (thousands)	Overnights (thousands)	Index for net utilisation of functional touristy boarding capacity (%)
	Existent (places)	Functional (thousands places-days)			
2012	5586	1620.712	146.218	290.555	17.92
2013	6506	1772.656	160.707	294.862	16.63
2014	6734	1797.278	176.226	333.365	18.55
2015	7015	1844.602	182.384	331.502	17.97
2016	7072	2041.316	224.105	428.658	21.00

Source: calculus after insse.ro

Table 7 Analysis of touristy flow during 2012–2016 in Neamţ County

Years	No. of tourists (thou. persons)	Absolute modifications		Dynamics index %		Dynamics rhythm %	
		$\Delta_{t/1}$	$\Delta_{t/t-1}$	$I_{t/1}$	$I_{t/t-1}$	$R_{t/1}$	$R_{t/t-1}$
2012	146.218	-	-	-	-		
2013	160.707	14.489	14.489	109.91	109.91	9.91	9.91
2014	176.226	30.004	15.519	120.52	109.65	20.52	9.65
2015	182.384	36.166	6.158	124.73	103.49	24.73	3.49
2016	224.105	77.887	41.721	153.27	122.87	53.27	22.87

Source: calculus after insse.ro

CONCLUSIONS

Analysis of touristy offer show a number of touristy boarding units with functions of touristy accommodation on types of structures from Neamţ County in those 5 analysed years (2012–2016) which varied between 177 and 235 touristy boarding structures, the numerous ones being agro-touristy boarding houses followed by hotels.

The existent boarding capacity on types of accommodation units from Neamţ County during 2012–2016 increased during those 5 analysed years and varied between 5586–7072 places, the most significant boarding capacity being founded in agro-touristy boarding houses and hotels. The existent boarding capacity in function on accommodation types of structures from Neamţ County in the same period of time (2012–2016) recorded yearly increases which indicate a good economical situation for tourism in Neamţ County during analysed period.

From comparative analysis of boarding units number and accommodation places in them in years 2012 and 2016 from Neamţ County could be observed the fact that in 2016 the number of boarding units increased from 177 as it were in 2012, to 235 and the number of boarding places also increased from 5586 in 2012 to 7072 in 2016.

Analysis of touristy flow in Neamţ County during 2012–2016, show the fact that both the number of foreigner tourists as well as the number days/tourist for the foreigners have a very low rate in arrivals and overnights in county, and evolution of tourists (foreigners and Romanians) increased in the analysed period. Mean duration of sojourn presented fluctuations during analysed period (2012–2016) being of 1.88 days also for Romanian and foreigner tourists.

Net utilisation index of functional touristy boarding capacity recorded fluctuant values in those 5 analysed years (2012–2016), in 2016 being recorded the highest value of 21.00%.

From analysis of touristy flow we could observe an increasing of dynamics index for tourists' number, per total mean dynamics number show an average increase of 1.112 times. Per ensemble the average level of tourists' number in Neamţ County during 2012–2016 was of 177.928 thousands persons, with an absolute mean increasing of 19.47 thousands persons. Mean dynamics index show a relative increase of 111.20% and a mean rhythm of 11.20%.

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