

## TOURISM OFFER IN ROMANIA AND NORTHERN TRANSYLVANIA – TERRITORIAL DISPARITIES

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**ABSTRACT. – Tourism Offer in Romania and Northern Transylvania – Territorial Disparities.** Explaining spatiality has been in the focus of tourism geographers since the beginnings, and the examination of spatial processes still represents a major challenge for researchers, knowing that there is no segment in the functioning of society in which spatiality is not present. The approach was to consider tourism as a complex spatial phenomenon, in order to explain better its processes. Romanian literature abounds in descriptive research of travel and tourism, discussing quantitative and qualitative issues, attraction classifications, tourism potential and geographic dispersal. However, a serious deficit manifests in explanatory research. Therefore, this paper aims to analyze the territorial disparities in the tourism offer of Romania, in generally and of Northern Transylvania in particular, in the light of current trends characterizing the national tourism industry. Besides spatial characteristics, this paper also deals with tourism penetration on regional level, and territorial concentration of accommodation capacity in the region of Northern Transylvania. The results show that in the moderately-high saturated destination of Northern Transylvania the accommodation capacity in use is spatially concentrated and only a few localities can be regarded as the strongholds of the accommodation basis. The study brings novel results especially for tourism planning, but also provides a basis for further research.

**Keywords:** *spatial aspects, regional disparities, tourism penetration, territorial concentration, accommodation capacity*

### 1. INTRODUCTION

Tourism plays an increasing role in regional development worldwide. Due to its certified socio-economic effects it is considered as a leading sector even in the disadvantaged regions. However, tourism is a spatial phenomenon and "the concept of space is inseparable of the concept of inequality" (Nemes Nagy, 1998: 51) . Tourism, nor as an industry, nor as spatial phenomenon (and nor its spatial, economic and social effects) are not evenly distributed in space, significant disparities occur nationally, regionally and locally (Hall and Page, 2002). Therefore, the analysis of regional tourism disparities provides a comprehensive view of the phenomenon of tourism in that country, in our case Romania, with special regard to Northern Transylvania.

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The palette of research concerning spatial aspects of tourism is very wide and diversified (Cozma, 2012a). Just to mention a few examples, the key concepts in the international literature are: *spatial patterns of supply* (Pearce, 1979; Smith and Mitchell, 1990; Hall and Page, 2002, 2006; Aubert, 2007; Michalkó, 2007, 2008), *spatial aspects of tourism* (Mitchell and Murphy, 1991; Pearce, 1995a; Hall and Lew, 1998; Rátz and Michalkó, 2009) or *space specific tourism products* (Dávid, 2007; Michalkó, 2008). In the Romanian literature researchers have been focusing on the *geographical basis of tourism* (Susan, 1980; Muntele and Iașu, 2003; Ciangă, 2006; Dombay, 2007; Cocean et al., 2009) and *geographical dispersal of tourism potential* (Dezsi, 2006; Ielenicz, 2009; Miruș et al., 2009).

Taking into account the opportunities of the travel and tourism industry in Romania (Light and Andone, 1996; Rațiu et al., 2010) and following the "spatial turn" (Benedek, 2011) in scientific research, this paper aims to analyze the territorial disparities in the tourism offer of Romania, with special regard to North-West development region.

The methodology involved desk study for the literature review and database compilation, followed by descriptive research, which meant a comprehensive geo-statistical analysis of the available statistical data<sup>2</sup>, and an explanatory research using regional analysis methods, such as building a complex impact indicator and measuring the territorial concentration of the tourism supply. For a better understanding, the obtained results were mapped.

## 2. THE ROMANIAN TOURISM TODAY

In 2012, in Romania there were 5,821 accommodation units (according to the official statistics), offering 103,160 permanent rooms and 32,773 seasonal rooms, therefore a total capacity of 74,134,614 places-days. 67.2% of the existing capacity was concentrated in hotels and motels, 9.9% in pensions, 9.2% in agro-touristic pensions, 4.6% in villas and bungalows, and the rest of 9.1% in other accommodation types. Regarding tourist destinations, the seaside concentrates 12.8% of the total capacity in use, spas and health resorts 13.3%, mountain resorts 17.8%, the Danube Delta 0.9%, Bucharest and county capital cities concentrate the most of the capacity, i.e. 36.8%, and the rest of 18.3% is located in other localities. In terms of comfort, most of the capacity (71.6%) is concentrated in 2 and 3 star units, while 4 and 5 star units concentrate only 1/5<sup>th</sup> (20.8%), 4.6% is found in 1 star units and the rest of 3.1% in unclassified structures.

The statistics show a 9.3% growth (to 2011) in the number of registered tourist arrivals (7,686,489 tourists), who spent in 2012 a total of 19,166,122 overnight stays (os.). 82.8% of the accommodated visitors were Romanians and 17.2% were foreigners. Foreigners preferred hotels (2,884,709 os.) and 3-4 stars category of comfort (2,370,202 os.). Romanians preferred hotels (1,229,602 os.), followed by pensions (956,482 os.) and agro-touristic pensions (828,541 os.), and more modest categories of comfort, of

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<sup>2</sup> official statistical data from: Tempo database of the National Institute of Statistics and the National Tourism Authority database

mainly 2-3 star units (12,115,896 os.). In terms of overnight stays, Romanians preferred the following destinations: Bucharest and county capitals (4,380,521 os.), spas and health resorts (4,156,939 os.) and the seaside (3,299,224 os.) while foreigners preferred Bucharest and county capitals (2,405,550 os.), followed by other localities (345,292 os.), and mountain resorts were on the third place on their list (242,224 os.).

The majority (70.1%) of the accommodated tourists came from the EU, mostly from the following countries: Germany (230,116), Italy (181,962), France (118,083), United Kingdom (91,867) and Hungary (90,573). Most tourists from outside the EU come from Turkey (34,240). 8.8% of the foreigners come from Asia, 7% from USA, 0.9% from Africa, 0.7% from Australia and Oceania and the rest from unspecified countries and territories.

The net use index of the accommodation capacity was 25.9% in 2012, dropping from 33.4% in 2005. The highest net use indices were registered by hotels (32.1%) and 5 star units (34.6%). The average length of stay on country level was 2.49 days, while regarding tourist destinations it was: 6.13 days in spas and health resorts, 4.28 days on the seaside, 2.16 days in mountain resorts, 1.78 days in the capital and county capital cities, 1.52 days in the Danube Delta and 1.82 days in other localities.

The main indicators of the accommodation capacity and activity for the period of 2005-2012 were summarized (table 1).

**Table 1.****Main indicators of the accommodation capacity and activity for 2005-2012**

	2005	2006	2007	2008	2009	2010	2011	2012
Tourist accommodation units	4226	4710	4694	4840	5095	5222	5003	5821
nr. of Hotels	989	1059	1075	1104	1159	1233	1308	1384
Functioning accommodation capacity *	54978	56499	57137	59187	61104	63808	68417	74135
in Hotels *	37007	37728	38432	39889	40586	42551	45204	47095
Number of accommodated tourists **	5805	6216	6971	7125	6141	6072	7031	7686
nr. of foreigners **	1430	1380	1551	1466	1276	1346	1516	1656
Overnight stays **	18372	18991	20593	20725	17325	16051	17979	19166
of foreigners **	3464	3242	3586	3359	2668	2767	3067	3297
Net use indices ***	33,4	33,6	36	35	28,4	25,2	26,3	25,9

Data source: NIS, 2014

\* thousand places-days

\*\* thousand number

\*\*\* percent

As can be seen, the number of units and capacity in use have been increasing during this period, to 137.7% in the case of units and 140% in the case of capacity (to 2005). Regarding the number of tourists there was a significant decrease in the years 2009 and 2010, mainly due to the global economic crisis. In 2011 this indicator began to grow again, reaching 109% in 2012 (to 2011). The same trend can be observed in the case of overnight stays, reaching 106.6% in 2012 (to 2011). In contrast to the rest of the indicators, the net use indices and the average length of stay are declining significantly since 2007-2008.

Analysing statistical data for 2000-2009 Bucurescu (2011) concluded that there was an important decrease in the interest of tourists in the seaside resorts, manifested especially in the case of foreigners, although the increasing number of tourism structures led to a constant accommodation capacity in the region. Furthermore a significant growth was observed in the tourism activity of the destinations "Danube Delta" and "other localities and tourist routes". The later destination, which excludes the capital city and county capitals, spas, seaside and mountain resorts as well, had the strongest positive evolution.

For 2012, The World Economic Forum ranked the travel and tourism competitiveness of Romania on the 68<sup>th</sup> place out of 140 countries, five positions lower than the previous year and far behind Hungary (39<sup>th</sup>) and Bulgaria (50<sup>th</sup>). According to this report the competitive advantages of Romania are its tourist infrastructure and cultural resources (WEF, 2013).

From an economic perspective tourism is as important in Romania as for the rest of the world. According to the WTTC<sup>3</sup> the economic impact of this industry is growing in Romania. Although the direct contribution to the GDP (1.4%) and Employment (2.2%) is quite low, the total contribution is much higher. The forecasts for 2022 are promising: 5.6% total contribution to GDP, 6.6% total contribution to Employment, 3.7 % to Visitor exports and 7.6% to Investments (WTTC, 2013).

In conclusion, although Romania has a high tourism potential, in international comparison the sector's performance is considered poor. On European level the Romanian tourism market is in development, but it relies mainly on the domestic tourism.

### ***2.1. The place and role of Northern Transylvania in Romania's tourism***

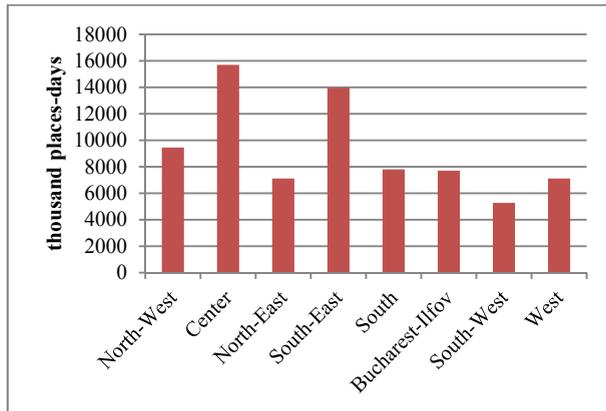
Northern Transylvania is one of the 8 development regions of Romania, composed by 6 counties: Bihor, Bistrița-Năsăud, Cluj, Maramureș, Satu-Mare and Sălaj. It covers 14.3% of Romania (i.e. 34.159 km<sup>2</sup>) and gives home for 13% of its population (2,744,914 inhabitants). The region has a strategic geographical position, being situated at the borders with Hungary and Ukraine, and also with the Centre, North-East and West regions of Romania. It's position on national and wider European context is further strengthened by its natural resources and values, the developed transportation system, its attractiveness from economic point of view, its cultural diversity and valuable tourism potential (Horváth, 2006). If we would to characterize the regions of the country with only two words, then Northern Transylvania could be described with "innovation" and "latent development potential" (Kurkó, 2011: 442).

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<sup>3</sup> World Travel and Tourism Council

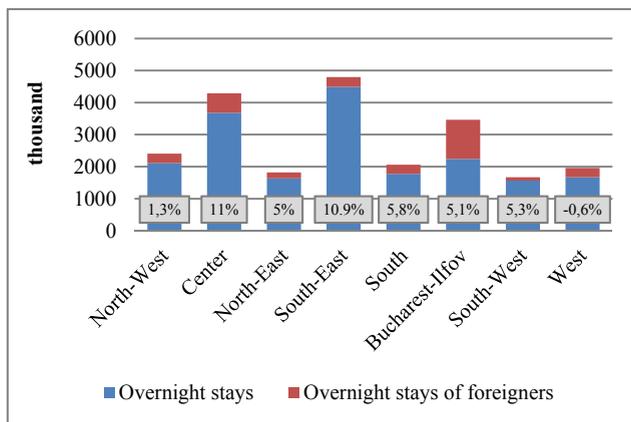
The historic cities and urban cultural centres (such as Cluj-Napoca, the future European Youth Capital), the ancient thermal baths (such as Felix), ethnographic regions (Maramureş or Kalótság), picturesque villages, National Parks, UNESCO World Heritage sites and so on contributed to the development of health tourism, cultural tourism, rural tourism, religious tourism, and even ecotourism and business tourism lately.

In terms of accommodation capacity in use, North-West region is situated on the third position (9.4 mil. places), after Centre and South-East regions (Fig. 1).



**Fig. 1.** Accommodation capacity in use in Romanian development regions, 2012 (Data source: NIS, 2014)

Regarding the quality of services, the situation in North-West exceeds the national average, but still remains low on international level. In terms of tourist turnover, North-West region is situated on the fourth place (2.1 mil. overnight stays), after South-East, Centre and Bucharest-Ilfov regions (fig. 2).



**Fig. 2.** Overnight stays in Romanian development regions, 2012 (Data source: NIS, 2014).

The international tourist's share of the tourism market, though improved in recent years, it remains low (292 thousand overnight stays of foreigners, i.e. 14%) It is noticeable that the increase in overnight stays to the previous year was only 1.3%, the second most lower on regional level. The net use indices in the region is lower than the country average, i.e. 22.3% and shows a declining trend (Cozma, 2012b).

On national ranking, regarding the overnight stays, the counties of Northern Transylvania occupy the following positions: 5. Bihor (1.03 mil.), 10. Cluj (510 k.), 25. Maramureş (186 k.), 28. Bistriţa-Năsăud (164 k.), 32. Satu-Mare (130 k.) and 37. Sălaj (90 k.).

All in all the most important competitor for Northern Transylvania is the Centre region, which has a much more efficient tourism performance.

### 3. THE TOURISM SUPPLY IN ROMANIA - TERRITORIAL ASPECTS

The tourist accommodation units have undergone serious typological transformations in the last 2 decades. The dominance of hotels and motels was put to an end by pensions. While straight after the regime change, in the early '90s, Romania had an accommodation capacity of more than 360 000 places, in 2000 this indicator showed a 20% decline. The cause of this subsidence is believed to be the consequence of physical and moral depreciation of traditional units, like villas and chalets, which were the specific units of health tourism and mountain resorts (Ciangă, 2006), preferred by the domestic tourists of the Communist regime (Light - Andone, 1996). After the new millennium, the accommodation capacity increased continuously and new types of accommodation units appeared, such as youth hotels, hostels, apartment hotels and vacation villages.

In 2012, on regional level, the Centre region concentrated the most accommodation units (25%), followed by South-East (19%), North-West (13%), North-East (12%), South and West (10% each), South-West (8%) and Bucharest-Ilfov (3%). Centre and South-East concentrated the most of the capacity in use as well (20% and 19%), followed by North-West (13%), South (11%), North-East, West and Bucharest-Ilfov (10% each), and South-West only 7%.

Three types of units dominate in the majority of regions: hotels, pensions and agro-touristic pension. There are two exceptions: South-East, where hotels, villas and bungalows are the most numerous, and Bucharest, where hotels are the most numerous.

Among other components of the tourism offer, we discuss the following: hospitality units, tourist information centres and tourism agencies (fig. 3).

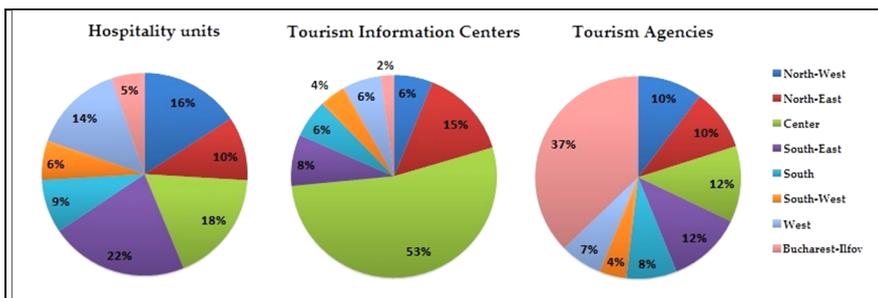


Fig. 3. Regional distribution of main tourism services, 2012 (Data source: NTA, 2014).

According to the National Authority of Tourism 22% of *catering establishments* (restaurants, bars, fast-foods, bakeries, pancake shops etc.) are found in South-East region, followed by Centre region with 18%, and North-West with 14%. *Tourist information centres* are not very numerous, a total of 49 centres are located in 22 counties, so half of the Romanian counties do not have such centres at all. Most of these centres are found in Centre region (53%, 11 only in Sibiu County). The capital city had at the moment of the research only one tourist information centre, compared to other European capitals and cities, where more such information points are placed strategically. In contrast, travel agencies are found in Bucharest (37%), followed by South-East (12%) and North-West and North-East (10% each). An estimation is that about 20 tourism agencies have predominantly incoming in their business structure<sup>4</sup>.

The spatial distribution of units and functioning capacity on county level shows the following. In 2012, the most accommodation units functioned in Constanța County (12.7%), followed by Brașov (11.1%) and Harghita (5.9%) counties. In comparison the highest capacity was registered in Constanța County again (14.4%), followed by Brașov County (10%) and Bucharest City (9.4%). The latest three concentrated 33.8% of the total capacity in use. The counties with the fewest unit number were Giurgiu and Teleorman (0,2% each) and Olt and Botoșani (0,3% each). The counties with the lowest capacity were Călărași and Teleorman (0,3% each) and again Giurgiu and Olt (0.4%). The highest concentration of units per square kilometer was in the Municipality of Bucharest (0.55 units/km<sup>2</sup>), Brașov (0.12 units/km<sup>2</sup>) and Constanța counties (0.1 units/km<sup>2</sup>). The largest accommodation capacity per capita was in Brașov (13.5 places-days/inhabitant), followed by Vâlcea (7.7 places-days/inhabitant) and Covasna (6.2 places-days/inhabitant) counties.

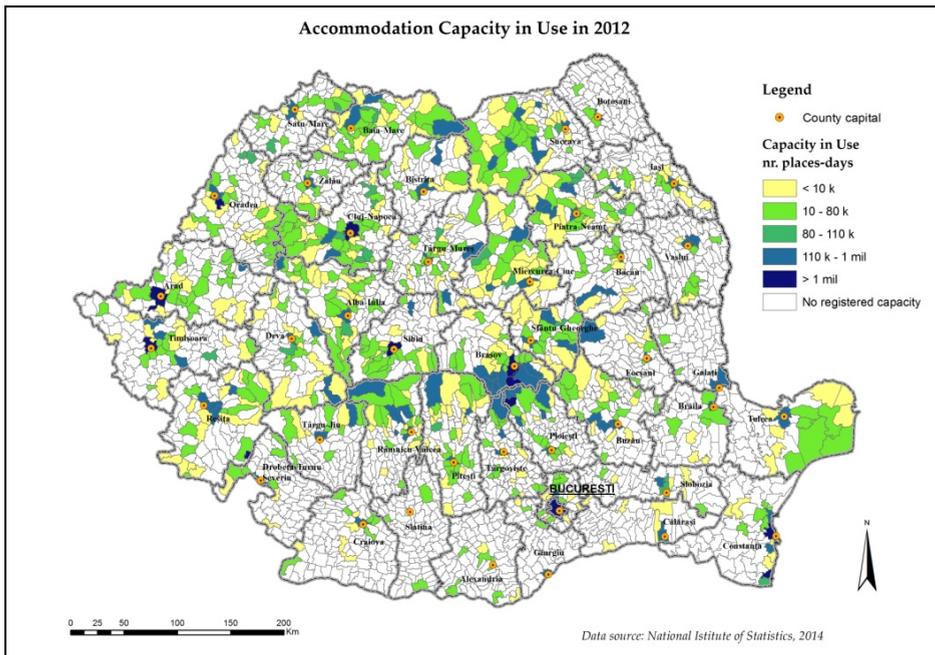
In terms of tourism services, the City of Bucharest and Sibiu, Cluj, Constanța and Brașov counties are the richest offer, while the poorest from this point of view are Botoșani, Călărași, Giurgiu, Ialomița, Mehedinți, Olt, Sălaj, Satu-Mare, Teleorman, Vaslui and Vrancea counties.

Most of the accommodation units show a close connection between the tourist attractions of that destination and the landscape characteristics (Michalkó, 2007). Space undoubtedly influences the development of tourism supply and there are destinations where geographical space defines the type and characteristics of the units that can be established (Kökény, 2009). For example, wellness and spa hotels have developed in the spa and health resorts of the country; or motels have developed primarily on the main trunk roads, serving mainly the automobile transit tourism; chalets are specific to mountain resorts, where there are possibilities for winter sports and hiking; and agro-touristic pensions fit perfectly into the landscape of the countryside. In the case of hotels and pensions there is no evidence of such territorial attachments. There are, however, situations when using the opportunities given by the geographic space special accommodations are developed, even unique ones, such as the ice hotel on the shores of Lake Bâlea (at 2000 m altitude, in the Făgăraș Mountains, rebuilt annually since 2005 and attracting 5000-8000 tourist per season) or the castle pension Haller (the first of its kind, in Ogra, Mureș County).

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<sup>4</sup> Wall Street [<http://www.wall-street.ro/articol/Turism/166288/turistii-straini-cheltuiesc-635-de-euro-de-persoana-intr-o-vacanta-in-romania.html>]

Fig.4. provides a comprehensive view of the accommodation base in Romania and the concentration of the capacity in different zones of the country. For a better visualization the capacity in use was divided into 5 groups: localities under 10 thousand places-days (308 loc.), 10-80 thousand (349 loc.), 80-110 thousand (24) – these are the ones around the country average, between 110 thousand and 1 million (97 loc.) and over 1 million places-days, i.e. localities with the highest capacity (13 loc.). The localities with a capacity under 5 places of no accommodation capacity at all were left white. As the map shows, only a limited number of localities participate in the reception of tourists (795 territorial administrative units).



**Fig. 4.** Accommodation capacity in use in the territorial administrative units of Romania, 2012 (Source: author, data from NIS, 2014).

In 2012 the 795 localities in Romania offered *total capacity* of 74.135.614 functional accommodation places-days. The highest capacity was recorded in Bucharest City (6,987,502), followed by Constanţa (4,299,183), Mangalia (3,496,043), Braşov (2,887,930) and Cluj-Napoca (1,873,338). The poorest capacity was registered in Zam, Şoimuş, Hărău and Baia de Criş (Hunedoara County, 248 places-days each) and Dărmăneşti (Argeş County, 350). On the first 10 places on the country ranking were cities and towns, except Sânmartin commune (position 7). It is important to mention that 77 cities in the country (24%), did not offer any accommodation capacity in 2012.

In 2012 *the hotel capacity* was found in 257 localities, the highest concentration being in Bucharest (6,684,313 places-days) and the lowest concentration in the City Berbești (Vâlcea County, 1.260). On the first 10 places on the country ranking were regional centres (cities of Constanța, Brașov, Cluj-Napoca and Timișoara), seaside resorts (Mangalia and Eforie), mountain resorts (Sinaia), and one commune with spa resorts occupying position 6 (Sânmartin, in Bihor County). While almost half (46.9%) of hotel capacity Romania is concentrated in cities and towns, nearly half (48.7%) of the cities and towns do not offer any hotel accommodation capacity. Bucharest itself holds 14.2% of the total hotel capacity, county capital cities hold 22.8% (Constanța in the most advantageous, Alexandria in the worst position), and the rest is divided among 123 cities and towns and 93 communes.

There were 465 localities in 2012 with *agro-touristic pensions* (6.864.934 places-days). On the top of the country ranking there were the communes Moieciu (672.170) and Bran (532.211) in Brașov County, followed by Sanmartin (207.670, Bihor county), Alexandru cel Bun (105.254) and Agapia (102.438) in Neamț county. These 5 communes concentrate 23.6% of the total capacity in rural pensions in Romania. The communes Zam and Baia de Criș (Hunedoara County, 248 each) were on the last positions, followed by Borsec (Harghita County, 310) and Dărmănești (Argeș County, 350).

All in all 80% if the capacity in use in Romania is concentrated in only 97 territorial administrative units, the first 10 from the country ranking offering 37% of the total accommodation capacity. Thus we can conclude that the countries tourism offer is focused in a limited number of localities, with large regional disparities. Comparing the map with the geographic dispersal of natural and anthropogenic tourism potential, at first glance, there is a close connection between the geographic characteristics of the country, the natural and the anthropogenic tourism resources.

### 3.1. Tourism Penetration Index

When analysing regional disparities, the multi-dimensional nature of inequalities makes their expression with a single indicator impossible (Benedek, 2004). Whereas tourism is also a complex, multidimensional phenomenon, it is useful to measure its effects with complex indicators. Therefore, for the study of tourism's territorial effects, the researchers of the ESPON 1.4.5. Project in 2006, developed a complex impact indicator, the TPI index (Tourism Penetration Index). The advantages of this indicator are that it creates a single variable of uni-dimensional measures of economic, socio-cultural and environmental penetration and a number of destinations can be compared.

In the original concept the economic impact is given by tourist expenditure per capita, the social impact by density of tourists per 1000 population and the environmental dimension by the number of bed spaces or rooms per square kilometre (McElroy – Albuquerque 1998; Sütő 2007; Tóth – Dávid 2010). The three individual indices are calculated by the following formula:

$$\begin{aligned} TPI_{eco} &= (x_{eco} - x_{eco\min}) / (x_{eco\max} - x_{eco\min}) \\ TPI_{env} &= (x_{env} - x_{env\min}) / (x_{env\max} - x_{env\min}) \\ TPI_{soc} &= (x_{soc} - x_{soc\min}) / (x_{soc\max} - x_{soc\min}) \end{aligned}$$

where:

$TPI_{eco}$  = economic;  $TPI_{env}$  = environmental and  $TPI_{soc}$  = social impacts;

$X_{eco}$  or  $or_{env}$  or  $or_{soc}$  = the value of the variable for that destination,

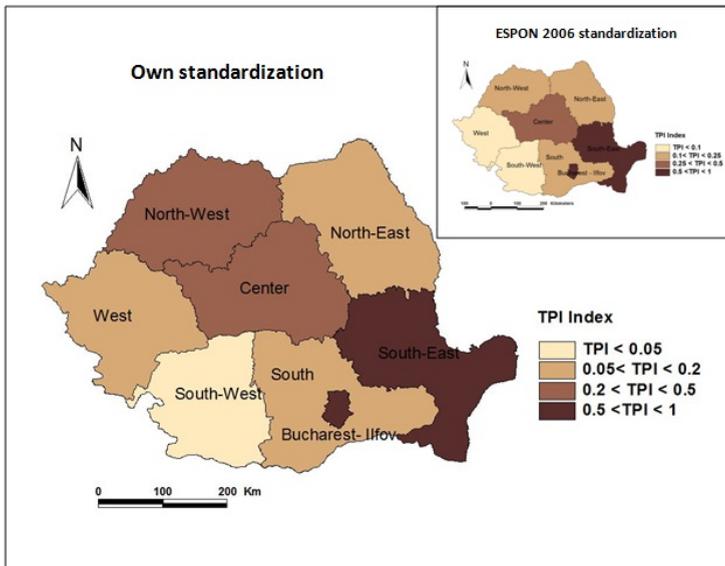
$X_{eco}$  or  $or_{env}$  or  $or_{soc}$  min and  $X_{eco}$  or  $or_{env}$  or  $or_{soc}$  max = the minimum and maximum values of the variable of all destinations in the sample.

$$TPI = (TPI_{eco} + TPI_{env} + TPI_{soc}) / 3$$

Although the results of the ESPON project are not flawless, due to methodological errors (Sütő, 2007), tourism development was classified into four groups: mature destinations (Austria, Switzerland, Greece, Spain and France), medium-high penetrated destinations (Denmark, Italy, UK etc.), medium-low penetrated destinations (Hungary, Bulgaria, Slovakia etc.) and minimally penetrated destination (Poland, Romania, Latvia etc.). It was indicated that it would be important to carry out the research on NUTS II and III levels as well, therefore our aim was to model the TPI index in Romania on regional level (Cozma, 2012b).

In Romania, to act upon the available statistical data on regional level, the individual indices were modified as follows:  $TPI_{eco}$  – accommodation and hospitality units generated GDP for 2008,  $TPI_{env}$  – accommodation capacity per square kilometre in 2008,  $TPI_{soc}$  – number of domestic and foreign tourists per 1000 inhabitants in 2008.

The obtained results led to two maps (Fig. 5), one using the ESPON standardization, and one using own standardization, which better shows the Romanian regional differences and taking in account the natural break points of the data set. The latter shows that North-West, together with Central region belong to the second category: moderately-high saturated destinations.



**Fig. 5.** TPI index in the Romanian development regions (Source: author, data from NIS)

Apart from lack of territorial data and other distorting factors, the indicator fulfils its purposes, namely the areas with the highest tourist arrivals and with the largest tourist load in the country are clearly shown out. The highest TPI index values were achieved by the internationally competitive South-East and by the capital region. On the bottom of the list lies the peripheral South-West region (Cozma, 2012b).

The use of this index needs further refinement, especially database completion and making the dataset more territorial. This is an important task for the Romanian tourism statistics, which must take place coordinated with EU institutions and meet international comparability requirements.

#### **4. THE TOURISM SUPPLY IN NORTHERN TRANSYLVANIA – TERRITORIAL ASPECTS**

The territorial characteristics of the tourism supply in Northern Transylvania is are not very different from those on national level.

In 2012, there were 730 accommodation units in the region, offering a total functioning capacity of 9.4 million places-days, almost 13% of the countries capacity. By the official statistics there were 2.1 million overnight stays, only 13.8% of it being registered by foreigners.

Fig. 6. shows the level of comfort in hotels, pensions and agro-touristic pensions (i.e. the three most popular unit types) and the capacity distribution in these units. In the southern part of the region 3-4 star hotels dominate, while in the northern part, the more modest 2-3 stars. The highest hotel comfort (5 star establishments) are entirely missing from Satu-Mare, Maramureş and Sălaj counties. Regarding the classification of pensions the dominance of 2-3 star pensions is observed. Agro-touristic pensions are classified with flowers, and the situation is similar than in the case of urban pensions. 5 star pensions and 5 flower agro-touristic pensions are almost entirely missing.

Fig. 7. shows the distribution of capacity in use and overnight stays on localities level. We see that the highest capacity and overnight stays are registered by the county capitals and the localities in the metropolitan area of Oradea, Cluj-Napoca and Baia-Mare. There is also important tourism activity in the following zones: Apuseni Mountains, Maramureş, localities with thermal baths in the west of the region or salt baths in the south-eastern part.

The statistics show that the tourism of North-West Region is *two poled*. Cluj-Napoca municipality and Sânmartin commune are the two most important centres of the region. By tourist arrivals Cluj-Napoca has the 1<sup>st</sup> place, but by overnight stays Sânmartin. This opposition is due to length of stay, which is 1.7 nights in Cluj and 7 nights in the thermal bath resorts of Sânmartin. The former is the region's most important cultural and business centre, while the later is an international thermal holiday destination. These two centres serve the 55.4% of the regions' tourism. The role of the other settlements is visibly much smaller. The most visited cities in the region are: Cluj-Napoca (240.029 arrivals), Oradea (110,900 arrivals) and Baia-Mare (60.736 arrivals), while the most visited rural localities outside the metropolitan areas are: Şieu-Măgheruş (5,969 arrivals), Tiha Bârgăului (5,095 arrivals) and Boghiş (4,540 arrivals).

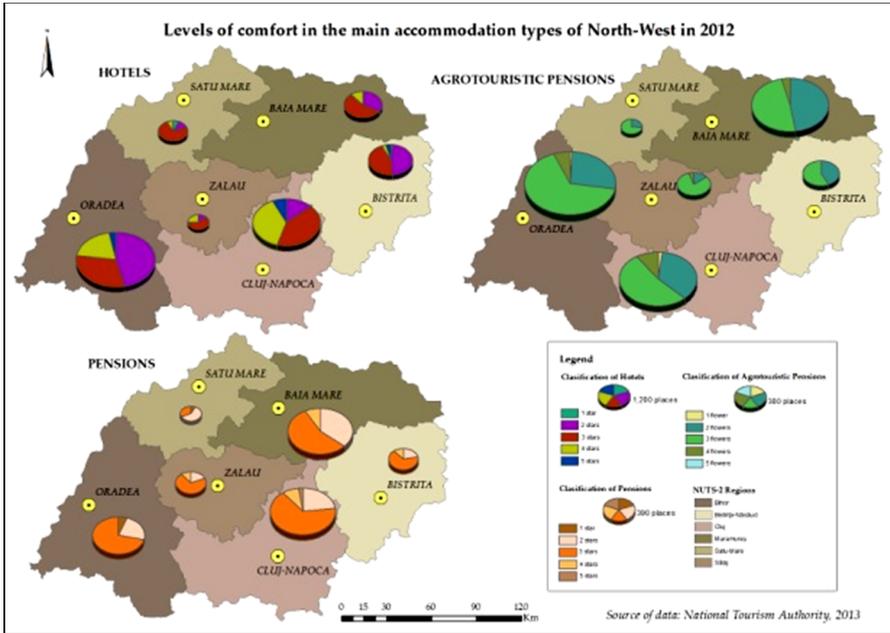


Fig. 6. Levels of comfort in Northern Transylvanian counties, 2012 (Source: author, data from NTA).

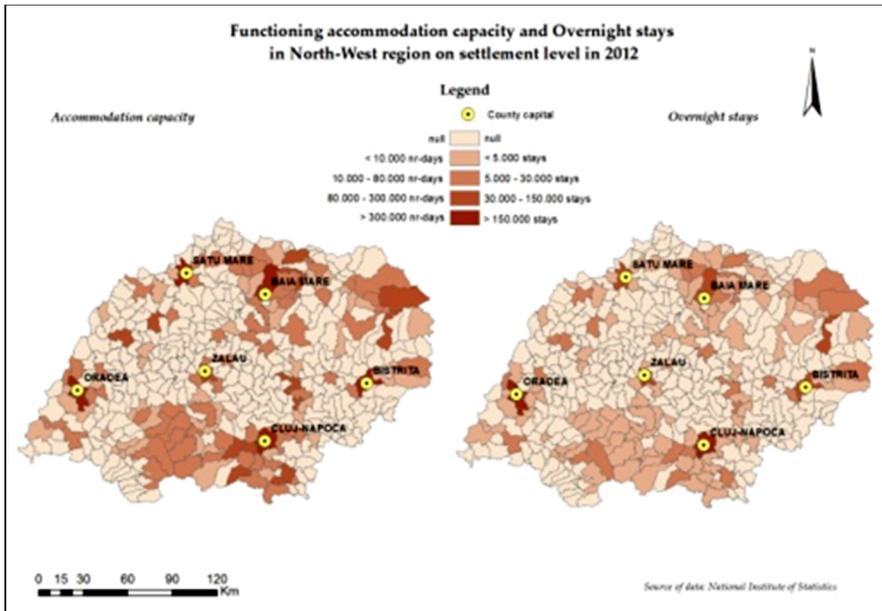


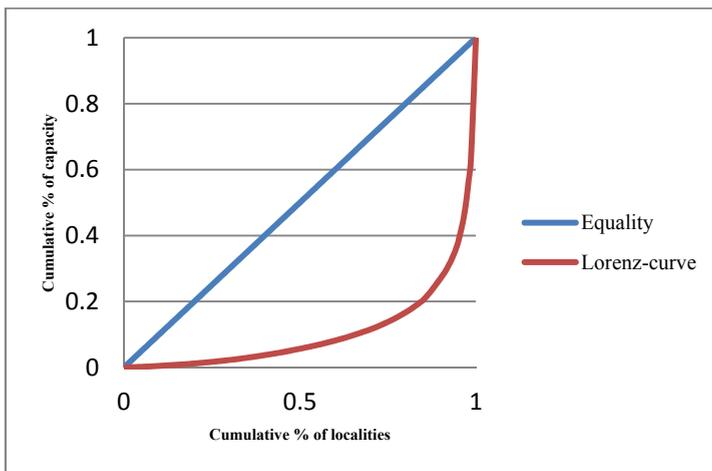
Fig. 7. Accommodation capacity in use and overnight stays in Northern Transylvanian localities, 2012 (Source: author, data from NIS).

#### 4.1. Territorial concentration

When analysing regional disparities we often encounter with the concept of *territorial concentration*, which means concentration, condensation of phenomena in a small area of the national territory. In our case the analysed phenomena was the accommodation capacity in use for 2012 on localities level in North-West development region (data from Tempo database of NIS, Romania; 140 territorial administrative units, with registered minimum 5 places). The rest of the region's localities were omitted from the analysis because of the distorting effects of the zero values.

A conventional way of analysing territorial concentration is using the *Lorenz-curve*, a specific graphical tool for visualization and interpretation of concentration. This method displays only the fact of concentration, it is not suitable to determine the extent of spatial inequality. It is often used in territorial analysis, because representing the same phenomenon in different time intervals, it gives information on the changes in regional disparity. The Lorenz-curve is in fact a two-dimensional graph, which plots the cumulative relative frequencies against the cumulative relative value sums (Nemes Nagy, 2005). Before preparing the curve, the data has to be ordered in ascending or descending way. If ordered in ascending, the curve will fall below the diagonal. If the distributions are the same the curve falls on the diagonal and means lack of concentration. In the extreme case of total concentration the curve coincides with the coordinate axes.

Fig.8. shows that there is no equality in the geographic distribution of accommodation capacity in use, but there is no total concentration either. The curve shows strong geographical concentration of the analysed phenomena, but does not provide quantitative data.



**Fig. 8.** Lorenz-curve for territorial concentration of accommodation capacity in use in Northern Transylvanian localities (Source: author, data from NIS).

In the following we intend to quantitatively measure this concentration using to acknowledged measurement tools: the Hirschman-Herfindahl index and the Hoover index.

Firstly, the main characteristic of the *Hirschman-Herfindahl index* is that it takes its minimum value when the analysed socio-economic phenomena is distributed evenly in space (the minimum is not 0, it depends on the number of elements) and values above 0,6 indicate high concentration, even monopoly. The calculation formula is the following (Nemes Nagy, 2005), where  $x_i$  is the given spatial feature in natural unit of measurement of  $i$  spatial unit:

$$HHI = \sum_{i=1}^n \left( \frac{x_i}{\sum_{i=1}^n x_i} \right)^2$$

The Hirschman-Herfindahl index in our calculations equals 0,086. In the interpretation of the indicator it becomes visible, in quantitative terms, what the Lorenz-curve already showed in the previous step, namely that territorial concentration of capacity in use in the region exists and as previous analysis and maps showed, a few localities can be regarded as the strongholds of the accommodation basis.

Secondly, the *Hoover-index* is one of the most popular, most commonly used indicator in regional disparities analysis. The index shows the percentage of criteria that needs to be transferred between the territorial units in order to have the same spatial distribution as the characteristics of the other (Nemes Nagy, 2005). The calculation formula is the following (Nemes Nagy, 2005), where  $x_i$  and  $f_i$  are two distribution rates, which maintain the following characteristics:  $\sum x_i = 100$  and  $\sum f_i = 100$

$$H = \frac{\sum_{i=1}^n |x_i - f_i|}{2}$$

The Hoover index in our case equals 34,75%, meaning the 34,75% of the accommodation capacity should be transferred in order to have the same distribution as the resident population.

## 5. CONCLUSIONS

The tourism sector in Romania has been in development in the last two decades, but although Romania has a high tourism potential and extraordinary diversity of natural and human environments, in international comparison the sector's performance is considered poor. The concentration of the accommodation capacity in just 27% of the country's territorial administrative units is not surprising. All things considered, not all the territories can and have to become tourist destinations and not all localities are suitable for the reception and entertainment of tourists.

The "innovative" region of Northern Transylvania can be considered as a competitive tourism destination, on Romanian level, and as such, occupies an important place in the countries tourism. Overall, regarding the tourism penetration, North-West belongs to moderately high-saturated destinations, which means opportunities for regional tourism development, and at the same time, more attention towards, and better management of tourism activities. The analysis showed that the tourism supply of accommodation units and capacity is territorially concentrated in the region, namely tourism is two poled: Cluj-Napoca municipality and Sânmartin commune are the two most important centres of the region, which serve 55.4% of the regions' tourism. The role of the other settlements is

visibly much smaller. The Lorenz-curve, together with the elaborated maps, visually confirmed what the statistics had suggested at first glance. Furthermore, the Hirschman-Herfindahl index enabled us to quantitatively measure the territorial concentration in Northern Transylvania.

The results of this study led to the conclusion that, besides the spatial characteristics of the tourism offer, the factors influencing these disparities are also very important to understand. Furthermore, in order to identify the growth factors and possible growth strategies for Northern Transylvania, this kind of exploratory research is crucial. Therefore our future research plans involve the analysis of possible factors influencing these territorial disparities.

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### REFERENCES

1. Aubert, A. ed. (2007), *A térségi turizmuskutatás és tervezés módszerei, eredményei*, PTE TTK Földrajzi Intézet, Pécs.
2. Benedek, J. (2004), *Amenajarea teritoriului și dezvoltarea regională*, Presa Universitară Clujeană, Cluj-Napoca.
3. Benedek, J. ed. (2011), *România. Tér, Gazdaság, Társadalom*, Kriterion, Nemzeti Kisebbségkutató Intézet, Kolozsvár.
4. Bucurescu, I. (2011), *An analysis of some recent statistics of the Romanian tourism*, Journal of Tourism, No.11, p. 38-44.
5. Ciangă, N. (2006), *România. Geografia turismului*, Presa Universitară Clujeană, Cluj-Napoca.
6. Cocean, P., Vlesceanu, Gh. și Negoescu, B. (2000), *Geografia generală a turismului*, Meteor Press, București.
7. Cozma, L.T. (2012a), *The importance of space in today's tourism*, Proceeding of the International Symposium: Sustainable Tourist Destinations. Identity, Image & Inovations, 23-24 September, Cluj-Napoca.
8. Cozma, L.T., (2012b), *Északnyugat Erdély helye és szerepe Románia turizmusában*, Észak-Magyarkországi Stratégiai Füzetek, IX., 2, Miskolc.
9. Dávid, L. ed. (2007), *A turisztikai erőforrások. A természeti és kulturális erőforrások turisztikai hasznosítása*. Budapest.
10. Dezi, Ș. (2006), *Patrimoniu și valorificare turistică*, Presa Universitară Clujeană, Cluj-Napoca.
11. Dombay, I. (2007), *Aturizmus földrajza*, Presa Universitară Clujeană, Cluj-Napoca.
12. ESPON (2007), Final Report, project 1.4.5: Preparatory Study of Spatially Relevant Aspects of Tourism. [[https://www.espon.eu/mmp/online/website/content/projects/261/428/file\\_2422/fr-1.4.5-full\\_revised\\_jan2007.pdf](https://www.espon.eu/mmp/online/website/content/projects/261/428/file_2422/fr-1.4.5-full_revised_jan2007.pdf)], downloaded October 2008.
13. Hall, C.M. and Lew, A. eds. (1998), *Sustainable Tourism Development: Geographical Perspectives*, Addison Wesley Longman, Harlow.
14. Hall, C.M. and Page, S. (2002), *The Geography of Tourism and Recreation: Environment, Place and Space*, Routledge, London and New York.
15. Hall, M. and Page, S. (2009), *Progress in Tourism Management: From the geography of tourism to geographies of tourism – A review*, Tourism Management, 30, p. 3-16.
16. Horváth, Gy. (2006) *Északnyugat-Erdély*. Dialog Kampusz Kiadó, Budapest.
17. Ielenicz, M. și Comănescu, L. (2009), *România. Potențial turistic*, Editura Universitară. București

18. Institutul Național de Statistică, Anuarul Statistic Turism, 2013.
19. Institutul Național de Statistică, Baza de date eDemos, 2014.
20. Institutul Național de Statistică, Baza de date Tempo, 2014.
21. Kökény, I. (2009), *Eltérő terek, eltérő szálláshelyek*, In Michalkó – Rátz szerk. A tér vonzásában: a turisztikai termékfejlesztés térspecifikus vonásai, KJF – MTA – MFT, Székesfehérvár-Budapest, p. 45-59.
22. Kurkó, I. (2011), *Régiók, regionális diszparitások*, In Benedek J. (szerk.) Románia. Tér, gazdaság, társadalom. Nemzeti Kisebbségkutató Intézet – Kriterion, Kolozsvár, p. 429-453.
23. Light, D. and Andone, D. (1996), *The Changing Geography of Romanian Tourism*, *Geography*, 81, p. 193-203.
24. McElroy, J.L. and de Albuquerque, K. (1998), *Tourism penetration index in small Caribbean Islands*. *Annals of Tourism Research*, 25, pp. 145-168.
25. Michalkó, G. (2007) *A turizmuselmélet alapjai*, Kodolányi János Főiskola, Székesfehérvár.
26. Michalkó, G. (2008), *A turisztikai tér társadalomföldrajzi értelmezésének új dimenziói*, MTA doktori értekezés, Budapest.
27. Miruț, C., Constantin, D.L. și Gruiescu, M. (2009), *Tourism Potential and the Diminishing of Regional Disparities in Romania*, *The Annals of the University of Oradea – Economic Sciences*, Vol.2, p. 151-155.
28. Mitchell, L.S. and Murphy, P.E. (1991), *Geography and Tourism*, *Annals of Tourism Research*, 18, p. 57-70.
29. Muntele, I. și Iașu, C. (2003), *Geografia Turismului. Concepte, metode și forme de manifestare spațio-temporală*, Sedcom Libris, Iași.
30. Nemes Nagy, J. (1998), *A tér a társadalomtudományban*, Hilscher Rezső Szociálpolitikai Egyesület „Ember – Település – Régió”, Budapest.
31. Nemes Nagy, J. ed. (2005), *Regionális elemzési módszerek*, ELTE Regionális Földrajzi Intézet, Budapest.
32. Niță, I. și Niță, C. (2008), *Piața turistică a României: realități, mecanisme, tendințe*, Editura Economică, București.
33. Pearce, D.G. (1979), *Towards a Geography of Tourism*, *Annals of Tourism Research*, 6, p. 245-72.
34. Pearce, D.G. (1995), *Tourism Today: A Geographical Analysis*, Longman, Harlow.
35. Rațiu, M.P., Oprescu, E.A. and Botea, L. (2010), *Tourism and Travel Industry in Romania: Challenges, Opportunities and Strategic Development Directions*, *Journal of Tourism Challenges and Trends*, 1, p. 83-94.
36. Rátz, T. and Michalkó, G. ed. (2009), *A tér vonzásában: a turisztikai termékfejlesztés térspecifikus vonásai*. KJF és MTA FKI, Székesfehérvár és Budapest.
37. Smith, R.V. and Mitchell, L.S. (1990), *Geography and Tourism: A review of of selected literature*. In Cooper C. (ed.) *Progress in Tourism, Recreation and Hospitality Management*, vol. 2, Belhavon Press, London, p. 57-70.
38. Susan, A. (1980), *Geografia turismului*, Cluj-Napoca.
39. Sütő, A. (2007), *A turizmus területi hatásai*, Falu, Város, Régió, 4, p. 36-50.
40. Tóth, G. and Dávid, L. (2010), *Competitiveness and complex impact indicators in the Hungarian tourism regions*, *Journal of Tourism Challenges and Trends*, 3, p. 111-121.
41. Wall Street article 21st May 2014  
[<http://www.wall-street.ro/articol/Turism/166288/turistii-straini-cheltuiesc-635-de-euro-de-persoana-intr-o-vacanta-in-romania.html>], downloaded June 2014.
42. World Economic Forum (2013), *The Travel & Tourism Competitiveness Report 2013 – Reducing Barriers to Economic Growth and Job Creation*, Ed. Jennifer Blake, Thea Chiese, Geneva.
43. World Travel & Tourism Council (2012) *Travel and Tourism Economic Impact 2012. Romania*. London.