



## TOURISM DEVELOPMENT IN HUNGARY ON THE EXAMPLE OF THE NORTHERN HUNGARY REGION

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### Abstract

The current study's topic is the summary of the results of a touristic core area impoundment whose target area is the region of Northern Hungary. The methodological basis of the research was given by the work of Antal Aubert and Géza Szabó who made a similar touristic impoundment along five parameter examinations. The matter of research is relevant as an investigation based on similar quantitative methods has not been made yet on the target area; moreover it consists of important results for the profession as the national tourism has evolved to a determining industry at a national economy level too. Based on what we read, it is essential to assert that which municipalities, areas are the region's real touristic scenes. As the results of the research are numerical data, it enabled to set up a ranking between the emerging core areas and the touristic municipalities. On this basis, it can be determined that which areas are the most preferable tourist places. Further advantage of the quantification is that the study can conclude to the touristic fullness as well, knowing the potential of the given destinations, municipalities. This knowledge is of major importance in the basis of setting of objectives in touristic strategies. The current research, regarding the future, is an ideal starting point to know the region's real tourism, and to compare with the already existing touristic zones, like for instance the priority holiday zones impoundment. According to the results we can stated that 6 touristic core area can be appointed in the region. The study also highlighted that Hollókő developed into a touristic destination which could contribute to the development of Nógrád county. In city level Miskolc and Eger are the most important destinations in the region.

### Key words

tourism, regional development, core area, Northern Hungary, tourism indicators

## INTRODUCTION

Tourism development is a key question in all countries where it plays an important role in the economy, and the sensitivity of governments into tourism is various in the European countries (Zhang, 2005/a-b; Jones – Munday – Roberts, 2003, Matlo-

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vic et al, 2008, Kozma et al., 2015, Sarfaraz et al., 2015, Buczek-Mitura, 2018). In the vast majority of the European states tourism administration is in accordance with the general administration of the country (Bujdosó, 2018). In Hungary the system of tourism administration is changing and its structure is developing. In our paper we present a new approach of tourism development system and its evaluation on the example of Northern Hungary Region.

The history of Hungary's tourism development started its growing period from 1945 after World War II. Between 1945 and 1947, the primary goal was the restoration of living conditions to an adequate level in most part of Europe. At the same time, the reorganization of tourism also started, but at this time in Europe, as well as in Hungary, the tourism meant by occupying soldiers and those on officials trips. In Hungary, the demands of the Soviet forces had to be adapted. Tourism in the communist era was characterized by the framework of the sector's economy planning and the development of the basic infrastructure has come to the lime-light. (Rehák, 2011)

Hungary's tourism started to grow into an economically important sector under the socialist regime. The first important act for domestic tourism was the Act of 1971, Law on Territorial and Settlement Development. Two points of the act of 1006/1971 .II.3. focuses on important tourism priorities. (Aubert, 2001)

- Development of Lake Balaton, Budapest and spas, which are the destinations that attract foreign visitors
- Development of tourism in urban areas which functions as place for weekend recreation

From tourism point of view, perhaps the greatest achievement of socialism was the right to organize the 1988 World Congress. About 7,000 travel professionals arrived to Hungary, resulting in listing Hungary on the world map of international tourism. (Rubovszky et al., 2009, Matlovicova-Husarova, 2017)

After the change of regime, unfavorable processes have started in the tourism of Hungary. This is because Hungary has lost its former prominent role among the socialist countries, and the whole Central and Eastern Europe has been opened for tourists. With the opening of the borders, Budapest and Lake Balaton became unnecessary as a meeting place for the East and West German relatives and friends. The new political, economic structure also created a new competitive position, where the Hungarian tourism supply had to meet the Western European level. In the early 1990s, the privatization of state-owned enterprises was launched in tourism, which was practically completely became privately owned. (Rubovszky et al. 2009)

In Hungary, we can talk about conscious regional tourism institutional development since 1996, which was established by the National Territorial Development Law and the integrational intention of European Union. The bottom-up organi-



zation of regional tourism management was only developed at Lake Balaton and South Transdanubia. Due to the limited number of organizations, in 1997, the National Tourism Committee decided to set up nine tourism regions covering the entire territory of the country. (Aubert, 2001)

These tourist regions eliminated in 2016 were the following (Figure 1).

1. Budapest-Central Danube region
2. Central Transdanubia
3. Western Transdanubia
4. Southern Transdanubia
5. Northern Hungary
6. Northern Great Plain
7. Southern Great Plain
8. Lake Tisza
9. Lake Balaton



**Figure 1**

Former tourist regions of Hungary

Source: [www.jumptohungary.hu](http://www.jumptohungary.hu)

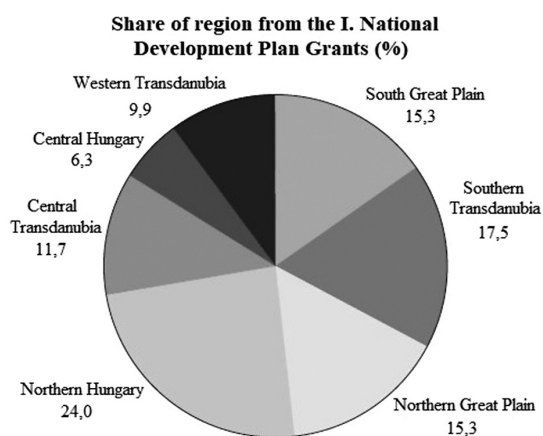
From 2017 the government introduced a new methodology which is based on destinations instead of attractions. The Hungarian Tourism Agency appointed five special tourist areas in order to implement joint tourist development (Balaton, Sopron-Fertő, Tokaj, Upper-Tisza and Nyírség, Debrecen, Hajdúszoboszló, Hortobágy and Lake Tisza, Danube Bend)

Parallel with the appointment of tourist development areas planning documents were accepted by the governments. Following the 1990s, the most significant domestic tourism development measure was the Széchenyi Plan between 2000-2003. The aim of the program was to improve the quality of tourism, which was based on the stimulation of domestic and international tourism and the increase of tourism performance. (Aubert - Berki 2010) The biggest achievement of the development plan is that the domestic tourism season grew from 221 days to 316 days. This is due to significant health tourism developments, which is the



leading tourist product of domestic tourism. The program's consequence was the domestic revival of this sector of tourism, which meant a number of spa developments at nationwide. It is also important to note that the development program was implemented 100% from domestic sources, which shows the importance of tourism in the national economy and the relationship of the then policy to this sector. (Aubert et al., 2000)

Hungary's accession to the European Union led to a number of tourism investments. Meanwhile, the number of catering establishments and the number of guest nights increased considerably. Between 2004 and 2006, EU developments became available under the I National Development Plan. The most significant funds were made available under the Regional Operational Program, which contributed to the achievement of national territorial development objectives. From the point of tourism, the first of the four main priorities of the Program - the strengthening of tourism potential in the regions - was of the utmost importance. His goals included increasing the profitability of tourism and the competitiveness of domestic attractions, as well as the quality development of services. The developments were justified by the fact that the tourism sector has a positive impact on employment and has become a major industry in the national economy (According to the Central Statistic Office the contribution of tourism rose by 5% in GDP and by 6% in employment in Hungary between 2016-2018). The implemented projects mainly focused on the development of competitive tourist attractions and raising of the standard of accommodation. The Northern Hungary region has the largest share of tourist resources at national level (Figure 2), which was similarly developed in subsequent development plans.



**Figure 2**

Share of the regions from the I. National Development Plan Grants

Source: Ministry of Municipalities and Regional Development; Tourism Secretary of State



The next cycle, which significantly affected the tourism sector, was initially the New Széchenyi Development Plan for 2007-2013 following the New Hungary Development Plan since 2010. The Regional Operational Programs gave opportunity to support tourism projects. The objectives of the Program were defined based on the experiences of the previous period and based on the target system of the national tourism development strategies. Out of the three constructions of tourism development, the attraction development was the highest weight, about 70-75%. This was followed by the development of accommodation and the support of TDM organizations. Almost three thousand projects have been implemented throughout the country with more than 400 billion forints financial support. In spite of this fact, the continuation of the mentioned financial aid structure is justified in the next period.

The aim of the Program was to increase the number of employees and to increase their revenue to the level of national economy. These key objectives were not met, due to several factors, such as the economic crisis, the weakening of the forint exchange rate and the black economy, which still characterizes the sector. (Vargáné, 2015) The long-term goal of the current 2014-2020 development plan of Széchenyi 2020 is to make Hungary one of Europe's most popular hosting areas. In order to achieve this development plan structured along the following objectives.

1. Hungary should be in the 30 best countries in the world regarding tourism competitiveness
2. Successful development of the most important national tourism products
3. Creating a fully functioning tourism organizational system
4. Improving domestic and international tourist base indicators
5. Successful opening towards new markets
6. Budapest should be among the top destinations in Europe and Central Europe and Balaton should be recognized European resort

In the current period, for tourism development many operational programs are available, which are the following.

- Economic Development and Innovation Operational Program (GINOP)
- Supporting the Competitive Central Hungarian Operational Program (VEKOP)
- Regional and Municipal Development Operational Program (TOP)
- Rural Development Operational Program (VP)

The most significant tourism sources of the period are available from GINOP, in which tourism is also present on several priority axes. Grants are available for attractions, services, destinations, national tourism marketing, and energy efficiency.

After the historical review of the Hungarian tourism areas, following the work of Antal Aubert and Géza Szabó, the next part is the detailed description of methodological criteria of the delimitation of the tourism core area and the results of the research on the Northern Hungary region.



## OBJECTIVES

The main objective of the study was to appoint the core areas in Northern Hungary region by quantitative methods. To state the hierarchy by settlements was also an aim of our work while during ranking the settlements potential we got a clear picture about the touristic potential of the region.

In our days tourism is one of the main elements of regional development documents however also plays a crucial role in economic development. Hence, in numerous less developed regions governments invested huge financial resources into tourism development. (Zhang, 2005/a-b; Jones – Munday – Roberts, 2003). Our target was also to examine how important is tourism in the regional development of the studied area.

## THEORETICAL FRAMEWORK

The research basic question is whether tourism could be a tool regional and local development in Northern Hungary region. The region is an ideal research area while assesses several touristic potential such as medical water, lakes, cultural and natural attractions. To prove the fundamental question we can examine the local (settlement) level. If settlement network is concerned by tourism, we can state that the tourism plays a vital role in the development of the region. Huge national and European funds invested into tourism also predestinate the fruition of basic statement as these financial tools contributed to the rising of statistic data and had developing effects.

## DATA AND METHODS

Tourism is a complex and multidimensional phenomena so that its affects can be examined by multidimensional factors. Such index is TPI index (Tourism Penetration Index) which is a complex affect factor in tourism and worldwide used (McElroy – Albuquerque, 1998). However, in the impoundment of touristic core areas there is not any widely accepted methodology.

The demarcation of this touristic core area in the Northern Hungary region was completed along the work of Antal Aubert and Géza Szabó. There are no uniform criteria system and methodology for the geographic delimitation of a tourism core area or any tourism area (Aubert - Szabó, 2007).

The application of this methodology was justified by the fact that the test target area has similar geographic characteristics, as well as measurability of the examined parameters, access to data are similarly available. The demarcation of the tourism core area of the Northern Hungary region was determined along five parameters, which are the following.

1. Current attraction
2. Determinative touristic products



3. Turnover indicator
4. Tourism networks and development activities
5. Local Tourist Tax

The core areas emerging from the survey are cleared up according to the current state, thus tourism investments can have a significant impact on the demarcation. However, due to the sensitivity of tourism to change, this is not surprising.

The examining factors were taken into account with different weights, the use of which was justified by hierarchy among the parameters. The following weight numbers are similarly defined as the baseline methodology.

1. Current attraction 20%
2. Determinative touristic products 25%
3. Turnover indicator 30%
4. Tourism networks and development activities 20%
5. Local Tourist Tax 5%

Henceforward, the details of each parameter can be read through the theoretical study and the practical results of the Northern Hungary region.

### **Current attractions**

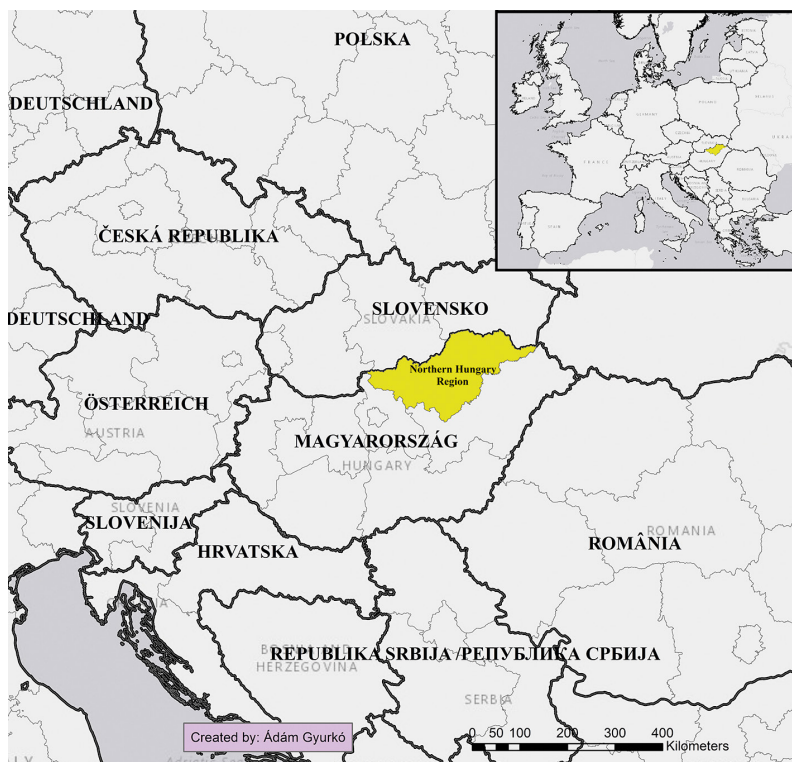
The study area is Northern Hungary region which location is shown by Figure 3. The region consist of 3 counties (Borsod-Abaúj-Zemplén, Heves és Nógrád) with 610 settlements in 13.428, 84 km<sup>2</sup> and 1.134.945 inhabitants (KSH, 2017). The region is bordered by Central Hungary and Northern Great Plain regions and Slovakia.

One of the most important factors for the regional / local tourism is the presence of attraction. The subject of this study was to count these attractions in the 610 settlements of the Northern Hungary region. Many of the settlements in the region were excluded from the investigation as a result of the first necessary screening. In fact, those settlements have been investigated further, where there has been tourism tax revenue and / or spent guest nights over the past decade. This was followed by an assessment of the tourist attraction based on scope. Individual settlements were awarded points if the destinations had at least a national level attraction (Table 1).

During the evaluation of attractions we also took into consideration the place image as tourist brands, destination image can appeal for tourists. Tourism marketing requires the handling of the destination as one product using three key issues: city identity, image and communication (Matlovičová- Kormaníková, 2014). Image building of cities is the task and the liability of local governments. (Matlovičová – Tirpakova - Mocak, 2019), During place or city branding planners have to concentrate on local actors, as well as on investors from outside (Tózsza, 2014)

The further categorization was carried out along the following lines.





**Figure 3**  
Location of Northern Hungary region  
*Source: Own work*

**Table 1** Scope of tourist attractions

Received points	Categories	Characteristic of categories
12,5	National attraction	Wide range of guest visit the place at national level, limited international interest due to the saturation or cultural features of the attraction.
15	Cross-border attractions	Significant foreign guests, mainly generated by the unique interest (e.g. festivals)
17,5	International attraction	An attraction with considerable tourist potential, attracting mass foreign tourists, mainly from neighboring countries
20	Global attraction	In our country, only a few such settlements exist. In Northern Hungary region, only Eger and the World Heritage sites (Hollókő old village and its surroundings, Tokaj-Piedmont historical wine-growing region, Aggtelek Karst and caves of the Slovak Karst).

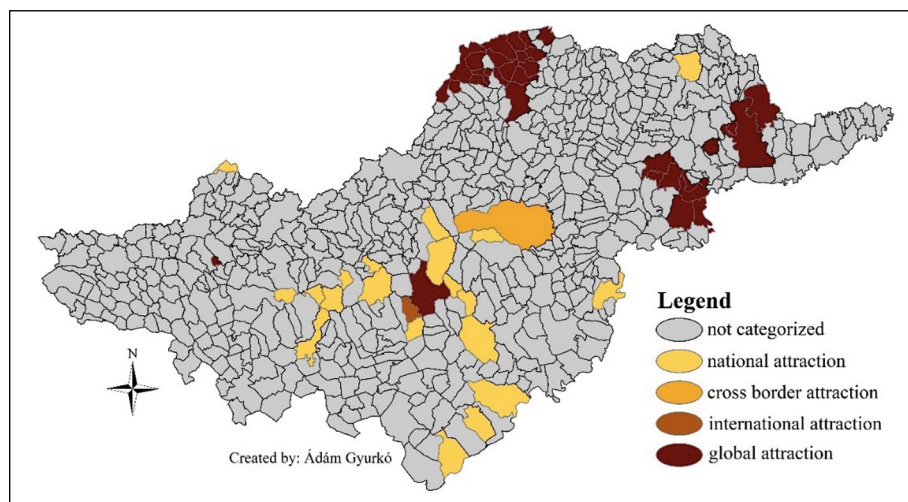
*Source: Own work*





Figure 4 shows which settlements received points for attraction evaluation in the Northern Hungary region. Although the methodology treats world heritage sites as a priority category, however, writers did not always take this into consideration, since after the study settlements without measurable tourism were taken out of the global attraction category. These settlements were Imola, Mezőzombor, Szegi, Szinpetri, Tornanádaska. This was needed to ensure that the listed settlements should not become part of the category of tourism core area, as there are no real tourism-generating attraction and service providers besides the World Heritage Site.

The question might be whether the World Heritage Sites are representing global attraction category. It is important to emphasize that, based on world heritage sites, it is possible to expand domestic tourism supply and also important sales factors for global tourism, which are also part of international databases. (Tasnádi, 2002) Based on what has been described - and after screening - in this case, the settlements belonging to the biggest category can be said that they are important basis for the global tourism attraction of the region, so their relevance is unquestionable.



**Figure 4**  
Tourist attraction rating of settlements in the Northern Hungary Region  
*Source: Own work*

### Determining tourist products

The second parameter survey was to take into account qualified service providers and objects in the region. In the region, the evaluation of the following service providers were justified.



- Rural hosts
- Members of the Wine Route
- Riding tourism providers
- Hungaricums that can be linked to products and world heritage that generate significant tourism

Tourism facilities have been taken into account, which enable settlements and regions to develop tourism products, analyzed parameters are the following.

- Waterway stops (ports, resting places) at rivers and lakeside trails
- Visitor centers established and operated in protected areas (national park, landscape protection area, nature conservation area)
- Educational paths to promote protected natural values
- Thermal spas
- Objects that form the basis of professional tourism (MICE supply)

Data from providers and about objects were first aggregated separately. The settlement reaching the highest score was the base (100%), from which proportion of points were given to other places. Then the merging of the two parameters was realized. Within the study the weight of the MICE and thermal spas was doubled, all other categories meant 1-1 points for the settlement.

### **Turnover indicator**

When evaluating tourism indicators, it can be concluded that there is a contradiction between the capacity and the guest turnover of commercial and private accommodation, one reason could be the seasonality of tourism. Thus, from a professional point of view, the guest nights show actual tourism turnover (Aubert - Szabó, 2007). In this parameter analysis, the number of guest nights for commercial and private accommodation was taken into account at the settlement level. In order for the delimitation to show a fairly long-term content, and the outbreaks of a given year do not significantly affect the results, the number of guest nights from 2004 to 2013 were used.

The settlements were categorized according to absolute and thousand-person values. Within the parameter the values are counted. With the weight of 50-50%. When categorizing the data, it is an important factor how detailed the data is being manipulated. The primary rule is that a boundary has to be decided regarding what values are represented by the certain data. (Eral, 2003)

### **Tourism networks and development activities**

The fourth parameter analysis of the core area is similar to the second one, which can also be divided into two major categories. In the first category, the settlements are organized in tourist networks. In the second, the European Union resources of



settlements for tourism development have been taken into account. The following network co-operations were considered, the existence of which means 1-1 points for settlements. The settlement that received the most points meant 100% base value, from which the other settlements gained proportional points.

- Thematic routes are the spatial organization of a product
- Tourism clusters
- Other regional cooperation, regional TDM organizations, Tourinform offices

Over the past decade, significant development resources have become available in the tourism sector. The main goals of these resources were attraction and accommodation development. The Northern Hungary region was the main target area of the ERFA tourism resources, receiving the largest source of funding, approximately 22%. For these reasons, tourism development resources are also part of the examination of the delimitation of the tourism core area. The tourism resources of the I. National Development Plan and the New Széchenyi Plan / New Hungarian Development Plan and the New Hungarian Rural Development Plan were summarized from 2004 to 2015 until the end of 2015, after which the data were classified into categories of values. This categorization was made on the basis of Earl Babbie's "Practice in Social Sciences Research".

### **Local Tourism Tax**

One of the measurable factors of actual tourism is local tourist tax levied by local governments. Accordingly, it can be stated that tourism businesses are operating in settlements where tourism tax revenue is reported. Taxation is optional for local governments, but the collected tax also includes state financial aid, thus providing access to significant development resources for settlements.

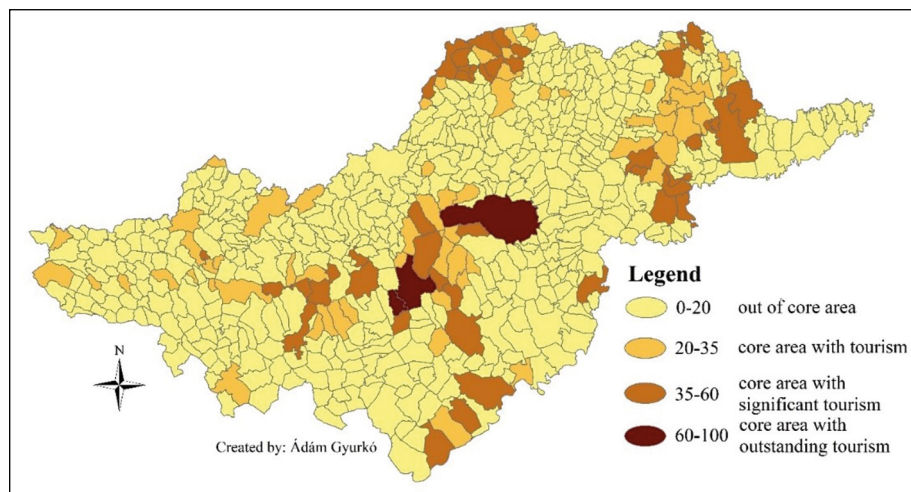
This study has taken into account the collection of tourist tax revenues from 2004 to 2013 in order to avoid distortion of annual outlays and to make the delimitation more time-consuming to the frequent changes in tourism. The absolute and thousand people data of settlements have been concluded by 50-50% share. The results were classified into value categories based on Earl Babbie's "Practice in Social Sciences Research".

## **RESULTS AND DISCUSSION**

The aim of the present study was to designate the tourism core areas of the settlements and adjacent territories in Northern Hungary region. The work of Antal Aubert and Géza Szabó meant base the objective investigation, who likewise defined the Southern Transdanubian region along five parameter analyzes. These test elements were described in more detail in the previous chapters. In the following, the results are summarized and the conclusions are drawn.



After a summary of the data and the weighting of the results, a quantified order of settlements emerged, where settlements could reach up to 100 points. For those who are familiar with domestic, regional tourism, it is not surprising that Eger achieved the highest score, 88.28 points. Of the 610 settlements in the region 436 received points, the remaining 174 did not receive any of the examined parameters, which may not be explained by bad tourist conditions but in many cases with the unworthy economic and social situation. The score of the settlements with the most points will be detailed in Figure 4 below.



**Figure 5**

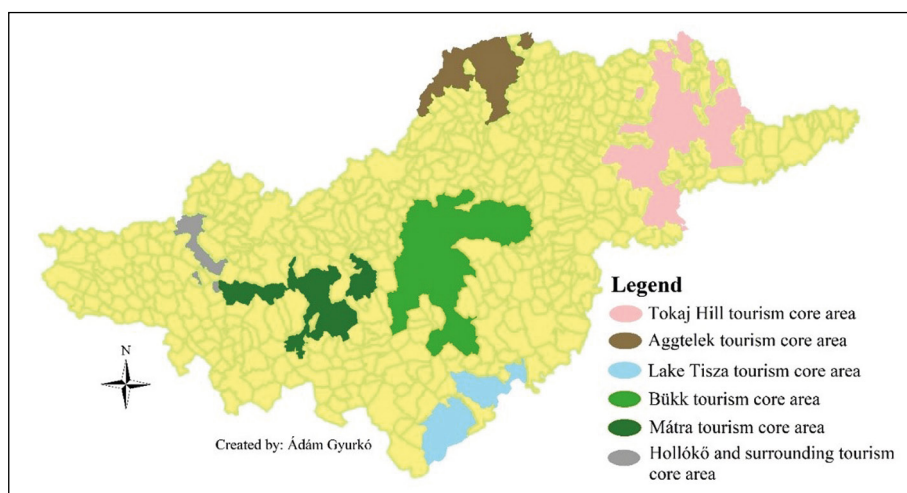
Settlement tourism core areas in the Northern Hungary region

*Source: Own work*

Figure 5 shows the result of the demarcation of touristic core areas of settlements in the Northern Hungary region. The results were divided into four categories by the writer of the present study, the first being the “non-core area settlement”. Settlements classified in this category cannot provide a level of tourism results that would indicate actual tourism development in the area. There are a total of five hundred settlements in this category, of which 174 could not reach a single point. The second category, with a total of 64 settlements, belongs to the “core area settlement with tourism”. The members of this category already have a measurable turnover indicator. Particularly small settlements, with the rise of rural tourism, are the seasonal destinations of territorial and regional tourism for tourists. In addition, Hatvan and Salgótarján belongs to this category, which also have real urban functions, thus enabling them to become tourist center in the future (Baranyi et al., 2014). The third group is the “core area settlement with significant tourism”, where



tourism has a significant influence on the everyday, social and economic indicators of settlements. The settlements in this category - with some exceptions - were able to reach a point in all parameters. Thus, it can be stated in general that the members of the category are settlements with accommodation, tourist services and attractions. Accordingly, they are the decisive members of tourism in the region, which even generate nationwide guest turnover. The major cities in this category are Gyöngyös, Mezőkövesd, Sárospatak, Sátoraljaújhely and Tiszaújváros. The most important small settlements regarding tourism in this category include Hollókő, Mátraszentimre, Szilvásszék, Tokaj. Following the summary of the results, writers have maintained a separate category for settlements that can be interpreted as a major tourist settlement. Based on the achieved scores, these settlements are Eger, Egerszalók and Miskolc. The three settlements listed are clearly the most important members of the region's tourism, which also generate cross-border guest turnover through their established tourism supply.



**Figure 6**  
Regional tourism core areas in the Northern Hungary region

*Source: Own work*

Figure 6 shows the result of the impoundment of the Northern Hungarian region's regional tourism core areas. Besides the demarcation of settlement, it was also an objective to designate contiguous areas that show a combination of significant tourist settlements. The resulting demarcation justified the removal of 13 large-scale settlements, of which the largest settlement was Tiszaújváros. On the basis of the relatively few separate tourist settlements it can be stated that tourism in the region is concentrated and well defined. For the left out settlements, priority



should be the regional tourism cooperation in the future in order to present new tourist core areas. At present, there are 6 tourist areas in the Northern Hungary region, of which the area with the largest number of settlements and geographic areas is Tokaj-Piedmont tourism core area. The listed areas with their weight are shown in Table 2, which is the sum of the points reached by the settlements. This limitation has only emerged in the Northern Hungary region, but it is necessary to mention that the Lake Tisza region, which is cross-regional and Aggtelek which is cross-border tourist core areas, so the actual extent of these areas are greater in reality.

**Table 2** Tourism evaluation of selected tourism core areas

Touristical core area	Number of settlements	Place	Touristical value	Place	Summary
Tokaj Piedmont tourism core area	29	1	976,26 point	1	1
Bükk tourism core area	22	2	846,84 point	2	2
Aggtelek tourism core area	20	3	743,41 point	3	3
Mátra tourism core area	14	4	466,65 point	4	4
Hollókő and its surrounding core area	7	5	205,03 point	5	5
Lake Tisza tourism core area	5	6	173,86 point	6	6

Source: *Own work*

The tourism results of the tourism core areas defined by this study are shown in Table 2. On this basis it can be stated that the most important tourist core area of the Northern Hungary region is the Tokaj Piedmont area. This is followed by the Bükk tourism core area, which includes the three most important tourist resorts. The largest unexploited potential is in the Mátra area, as many of the towns with significant tourist potential have not been included in the category of core area. This is mainly due to the lack of accommodation and attractions. There is also a potential for the Lake Tisza, as the lake offers many opportunities to spend leisure time. However, the poor economic and social conditions of the region are still felt today in the highly sensitive tourism sector as well. In the future, it is certainly appropriate for these areas to establish a complex strategy to overcome these problems. One of the biggest obstacles for the development in Aggtelek and Hollókő that the area is poor with settlements with urban functions. Thus, their tourism potential is also very limited.



**Table 3** The rankings of the first twenty settlements reached the highest point in the impoundment of the Northern Hungary region

	Name of the settlement	County	District	Tourism Core Area	Reached point
1.	Eger	Heves county	Eger	Bükk	88,28
2.	Miskolc	Borsod-Abaúj-Zemplén county	Miskolc	Bükk	72,51
3.	Egerszalók	Heves county	Eger	Bükk	65,80
4.	Tokaj	Borsod-Abaúj-Zemplén county	Tokaj	Tokaj-Hegyalja	59,47
5.	Hollókő	Nógrád county	Szécsény	Hollókő and its surrounding	58,55
6.	Szilvásvár	Heves county	Bélapátfalva	Bükk	56,14
7.	Mátraszentimre	Heves county	Gyöngyös	Mátra	54,41
8.	Sárospatak	Borsod-Abaúj-Zemplén county	Sárospatak	Tokaj-Piedmont	54,06
9.	Mezőkövesd	Borsod-Abaúj-Zemplén county	Mezőkövesd	Bükk	53,22
10.	Aggtelek	Borsod-Abaúj-Zemplén county	Putnok	Aggtelek	52,23
11.	Gyöngyös	Heves county	Gyöngyös	Mátra	51,32
12.	Bogács	Borsod-Abaúj-Zemplén county	Mezőkövesd	Bükk	50,88
13.	Demjén	Heves county	Eger	Bükk	50,75
14.	Teresztenye	Borsod-Abaúj-Zemplén county	Edelény	Aggtelek	50,73
15.	Tolcsva	Borsod-Abaúj-Zemplén county	Sárospatak	Tokaj-Piedmont	49,95
16.	Poroszló	Heves county	Füzesabony	Lake Tisza	49,88
17.	Bodrogkeresztúr	Borsod-Abaúj-Zemplén county	Tokaj	Tokaj-Piedmont	49,13
18.	Noszvaj	Heves county	Eger	Bükk	48,19
19.	Sátoraljaújhely	Borsod-Abaúj-Zemplén county	Sátoraljaújhely	Tokaj-Piedmont	47,14
20.	Jósvafő	Borsod-Abaúj-Zemplén county	Putnok	Aggtelek	47,06

Source: own work

Table 3 shows the rankings of twenty settlements that have reached the most points in the core area. The town of Eger is located in the first place, which is the most outstanding tourist destination in the region, as it was the first in almost





all studies. The first great surprise for the authors in the ranking was the city of Gyöngyös, which is only 11<sup>th</sup> in comparison to its tourism potential, preceded by a number of smaller settlements, and not the first place in its tourism core area, since Mátraszentimre is in the 7<sup>th</sup> place. Surprisingly relatively good positions are Tereszténye (14<sup>th</sup>), Tolcsva (15<sup>th</sup>), Noszvaj (18<sup>th</sup>) and Bodrogkeresztúr (17<sup>th</sup>). These settlements are excellent examples of the potential of rural tourism, as the pledge of their good performances is primarily sought not in attractions but in services provided by rural tourism.

## CONCLUSIONS

Summarizing the results of the demarcation of the tourism core area in the Northern Hungary region revealed which settlements and regions are real tourism operators in the target area. Except for a few players, the emerging rankings did not cause any surprise, but the interesting thing about the results is that large areas of settlements and existing territorial delimitations, such as the highlighted holiday resorts, show significant differences. Due to such differences, the true value of this study shows that quantitative methods provide an excellent basis for performing comparative analyses.

The aim of the study was to appoint the touristic core areas of Northern Hungary region by mathematic methods. From the results of the study it can be stated that there are six regional tourism core areas in the Northern Hungary region, in which there are still unused potential. The absolute winner of the settlement demarcation is Eger, which has grown into the most important tourist town of the region. The research also aimed the comparison of potential of the different areas. Among touristic core areas Tokaj-Piedmont became the first ranking in touristic potentials followed by Eger, Miskolc and Egerszalók from Bükk Mountain.

. In our days tourism is definitely a tool of regional development. Starting from this point we needed to state how many percent of the settlements is concerned by tourism. Taking into consideration the tourism and regional development, it can be stated that this sector is of the utmost importance for the region, since 110 settlements have been included in the core area, which accounts for about 20% of all settlements in the region. The daily, social and economic conditions of these settlements are greatly influenced by tourism. The tourism sector may become one of the cornerstones of the long-term development strategy of the region, with significant unused potential and tourism resources.

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