

IMPACT OF TOURISM DEVELOPMENT ON THE ECONOMY OF THE SMALL REGIONS IN THE REGION OF NORTHERN HUNGARY

Zsolt Péter

*University of Miskolc, Faculty of Economics,
Institute of World and Regional Economics*

1. ABSTRACT

Almost every region in Hungary pursues endeavours at developing tourism. It is, however, doubtful whether we can count on tourism to exert significant impacts on the economy everywhere. The paper attempts to answer the fundamental questions of tourism development: what to develop and where and what funds to use for the development. It makes an overview of the planning documents involving tourism development in the small regions in the region of Northern Hungary and gives recommendation for their small-region-specific modifications based on their tourism and economic positions.

Key words

Tourism development, tourist destination lifecycle curve

2. CONCENTRATION IN TOURISM

The Hungarian National Tourism Development Strategy (2005-2013), and the tourism development strategy of the region of Northern Hungary have created the background for local and small region tourism planning [1], [2]. The small regions in Northern Hungary prepared their conception plans and strategies for tourism development one after the other in the 2000s (Figure 1).

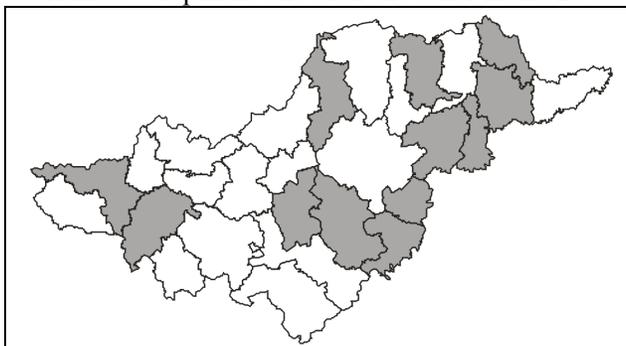


Figure 1

Tourism development documents in the small regions of the region of Northern Hungary

Source: author's own work

The impact study of tourism development in the small regions was performed on the basis of the changes in values of national and regional tourist traffic due to the large number of units to be analysed.

The Hirschman-Herfindhal concentration index (K), where x_i is a regional characteristic given in a natural unit of measurement (number of bed nights), was used for evaluating the concentration of bed nights [3].

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

The set of values of the index is $1/n \leq K \leq 1$, where n is the number of small regions. A value above 0.6 of the index shows considerable concentration [3]. The values of the concentration index were calculated for the period 2000-2007, for the total, foreign and domestic bed nights, based on the national and regional small region data series.

The national concentration index of bed nights showed a small increase in the period until 2005, and then a decrease from 2006 on (Figure 2). In the region of Northern Hungary the value of concentration decreased until 2003, after which the spatial concentration of the number of bed nights increased to a small extent.

The index of the concentration of domestic tourist traffic is substantially lower compared to the cumulated value; in Hungary it was around 0.03 in the period 2000-2007, which shows a spatially more uniform distribution of domestic bed nights. In the region of Northern Hungary the index assumes values in the range 0.1-0.13 throughout.

The changes in the concentration of foreign bed nights show utterly different features. The national and regional data series present a more significant spatial concentration than that for domestic tourist traffic.

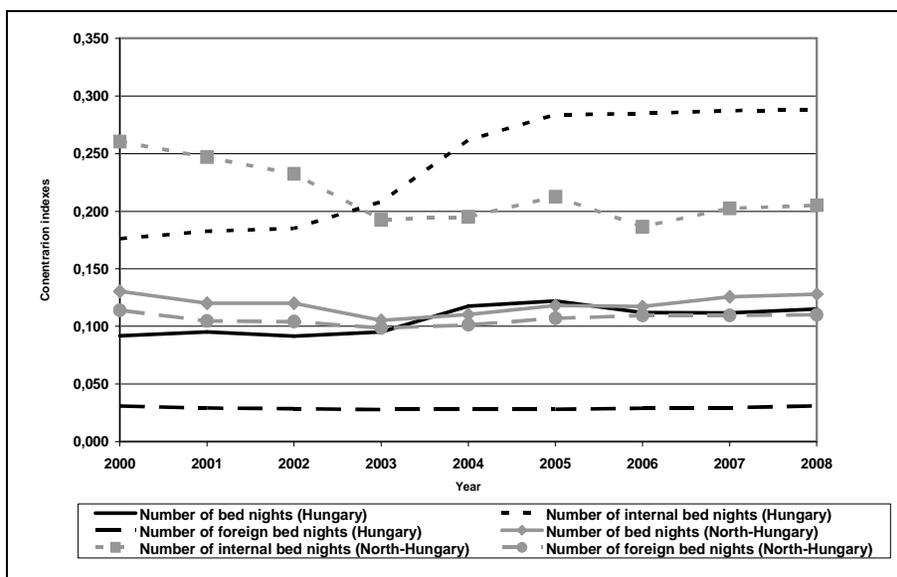


Figure 2

Changes in the values of the Hirschman-Herfindhal concentration index in Hungary and the small regions of the region of Northern Hungary.

Source: Author's own calculation based on CSO data

The value of the concentration index grew significantly from 0.176 to 0.287 nationally in the seven years. The improvement experienced in the region is only apparent, for it is mainly due to a substantial decrease in foreign tourist traffic (-85,178 bed nights), which affected particularly the small regions of Eger and Mezökövesd having a more developed tourism trade.

3. RELATIONS OF THE FACTORS DETERMINING TOURISM DEMAND

The indicators describing tourism supply, the economic and social situation of the settlements and the social conditions of the population were used to determine the factors referring to the development of tourist traffic of their small regions by means of main component analysis.

The appearance of tourists at regional level is influenced to a greater extent/more frequently by the tourist trade supply (the presence of accommodations, catering facilities and other service providers) and economic activity of the regions (income/revenues of private persons and local governments, the number of enterprises and non-profit organisations, the rate of those economically active and indicators relating to the standard of living). It is influenced to a lesser extent/less frequently by the force of attraction of the region (strengthening of the real estate market in the region and the rate of the

migration equilibrium) and the social situation of the region (criminality or the rate of those receiving social allowances).

The factors of tourist traffic were compiled by means of linear regression equations for all of the seven regions.

In the model for the region of Northern Hungary, based on the results of main component analysis, the factors of ‘tourism supply’ and ‘economic activity’ appeared in a significant way. The model is able to explain the specific values of the number of bed nights in the small regions in 68.3%.

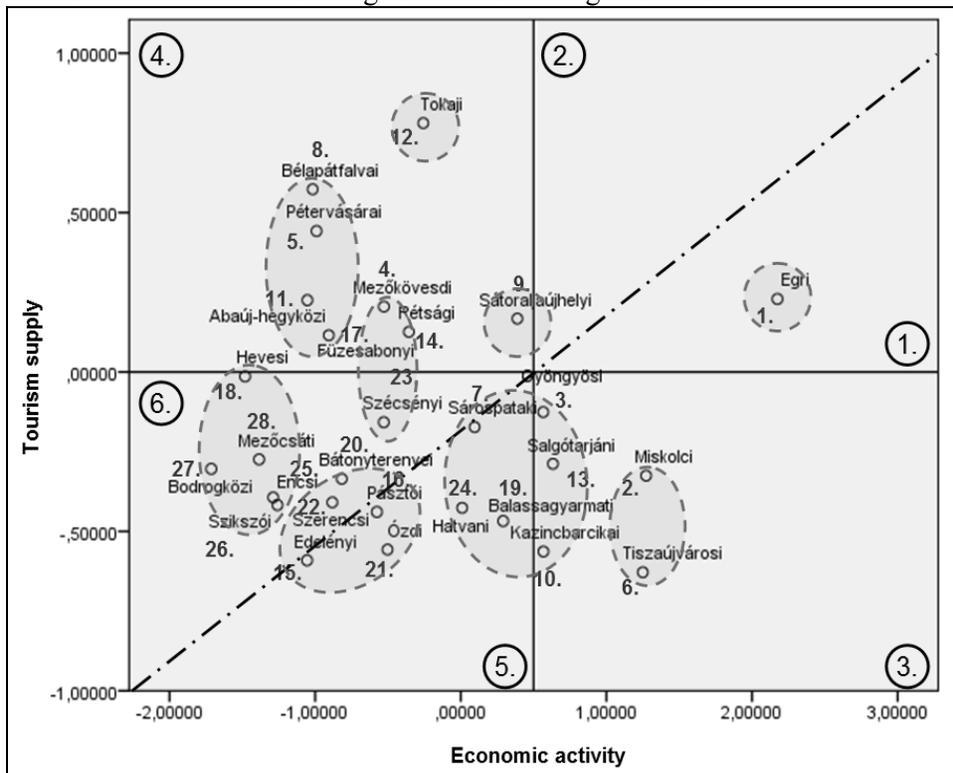


Figure 3

The small regions of Northern Hungary based on the eigenvalues of the factors of ‘Economic activity’ and ‘Tourism supply’

Source: author’s own calculation based on CSO data

The small regions in the region of Northern Hungary were placed in a coordinate system given by the dimensions of ‘tourism supply’ and ‘economic activity’ (Figure 3). The small regions were positioned based on the eigenvalues of the main component analysis. The value 0 represents for both factors the national average, with positive values representing above average and negative values representing below average performance.

The area below the diagonal is occupied by the small regions whose 'tourism supply' is better than their 'economic activity'.

The area above the diagonal is occupied by the small regions whose 'tourism supply' has a better position than that of their 'economic activity'. The two factors and their relations to each other were used to establish six categories, as shown in Table 1.

Table 1

Small region categories established on the basis of the factors of 'Economic activity' and 'Tourism supply'

Number of category	Category description	Small regions (given by their centres) put into the category
1.	Above average 'Economic activity' and 'Tourism supply' The position of the small region is more favourable in terms of 'Economic activity'.	Eger
2.	Above average 'Economic activity' and 'Tourism supply' The position of the small region is more favourable in terms of 'Tourism supply'.	-
3.	Above average 'Economic activity', below average 'Tourism supply'	Miskolc, Gyöngyös, Tiszaújváros, Kazincbarcika, Salgótarján
4.	Above average 'Tourism supply', below average 'Economic activity'.	Mezőkövesd, Pétervására, Béalapátfalva, Sátoraljaújhely, Abaúj-hegyköz, Tokaj, Rétság, Füzesabony
5.	Below average 'Economic activity', below average 'Tourism supply'. The position of the small region is more favourable in terms of 'Economic activity'.	Sárospatak, Edelény, Pásztó, Balassagyarmat, Ózd, Hatvan
6.	Below average 'Economic activity', below average 'Tourism supply'. The position of the small region is more favourable in terms of 'Tourism supply'.	Heves, Bátorfyerenye, Szerencs, Szécsény, Encs, Szikszó, Bodroghöz, Mezőcsát,

Source: author's own work

The small regions were grouped by means of cluster analysis. In the analysis the 'group average method' was used based on squared Euclidean distance, where the distance between two groups is given by the average of their pairs of elements divided by the number of elements in the two groups [5]. By means of the method, groups of small regions with similar regional positions were determined (Table 1).

It is not fortunate to judge the positions of small regions only by their belonging to a certain category, for their sets of values fall into rather wide ranges.

In order to evaluate the positions and to formulate recommendations, the small regions were placed on one of the tourism destination lifecycle curves characteristic of them (Figure 4). The small regions were positioned using the specific values for 1990-2007 and the directions and dynamics of the changes.

The original model created by Butler was modified: the axis Y was used to represent the specific values of bed nights, instead of their number. Butler's model positions a single tourism destination/area on the basis of the data for the previous years, the features of the tourist environment, and the direction and dynamics of the changes. In its interpretation, one curve can be drawn for each region.

As the first step of positioning the small regions, characteristic lifecycle curves were identified.

- Curve 'A' has the small regions on it whose specific tourist traffic is among the highest; on the basis of the growth in the past years and their potentials it is probable that they possess significant growth potentials.
- The small regions of growth path 'B' are in the middle field on the basis of their specific values and they are characterised by small-scale growth or decline, or stagnation.
- Curve 'C' has the small regions on it whose tourist traffic is among the lowest as compared to the number of inhabitants in the region; in their positions very small changes can be observed, mostly towards decline.
- The small regions on curve 'D' show insignificant tourism performance, with further marginalisation processes to be expected.

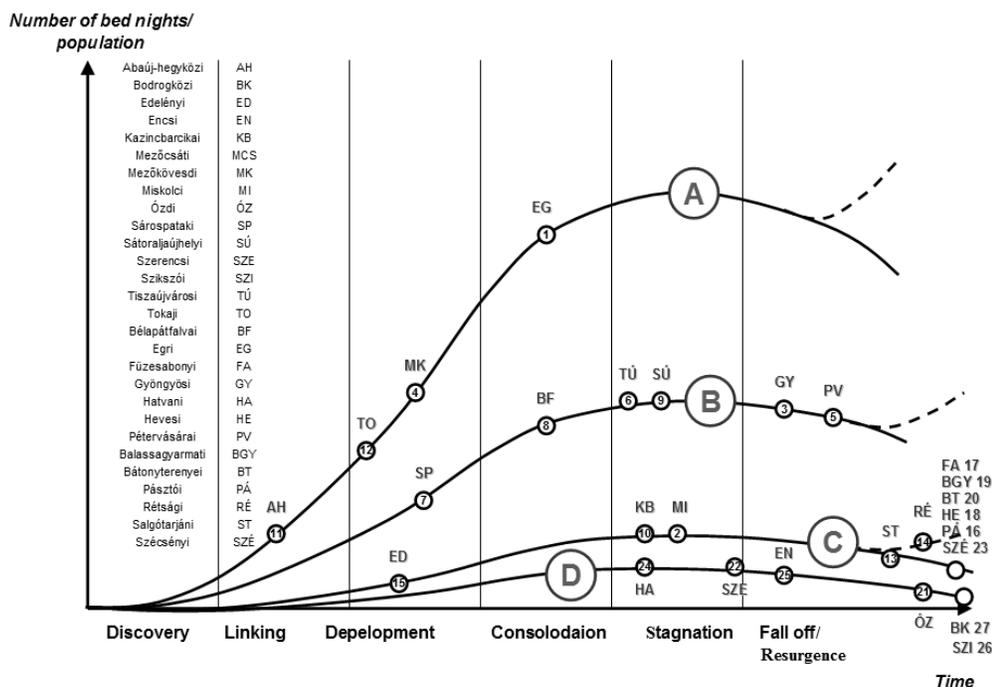


Figure 4

The small regions of Northern Hungary on tourism destination curves

Source: author's own calculation based on CSO data

Next, the small regions were placed on the curves according to their individual characteristics. As a result, the time dimension of axis X is always to be interpreted from the aspect of the small regions. The meaning of the positions of small regions is: a given small region is in which growth stage of the curves 'A', 'B', 'C', or 'D' as defined above.

4. RECOMMENDATIONS FOR A BETTER DEFINITION OF THE TOURISM DEVELOPMENT OBJECTIVES OF SMALL REGIONS

On the basis of the eigenvalues of the factors of 'economic activity' and 'tourism supply', a separate group is formed by the small region of Eger, where 'economic activity' and 'tourism supply' are above average. The 'economic activity' level of the small region is more favourable than its 'tourism supply', which is outstanding even at regional level. The capital required for developing 'tourism supply' may even come from internal sources. Due to its reputation, tourist traffic and growth potential, investors coming from outside of the region are also present and further investments may be expected. Maintaining the growth rate will require improving the efficiency of the industry, improving the

(international) awareness of the region and creating new (man-made) tourist attractions.

Similarly, a separate 'group' is created by the small region of Tokaj, with its regionally outstanding 'tourism supply', which exceeds its economic potential by far. Sources for developing tourism may originate in the region only to a lesser extent. Thanks to its growth potential, the national and international reputation of the name 'Tokaj', national and international investors are present in significant numbers particularly in the fields of viticulture, gastronomy and hostelry. The funds necessary for increasing the tourist traffic of the small region to a greater extent and for creating new/man-made attractions are most likely to be obtained from public funds. Resulting from the characteristics of the project application systems, first of all initiatives by the local governments may bring about quality changes in the region. Care must be taken, however, that the developments to be realised should meet the sustainability criteria. The private sector could take steps first of all towards 'tourism supply', a change towards reliable and high quality. It is the author's personal experience that he consumed both the best and worst quality wine he had ever had in Tokaj. It is not worthy of the wine of Tokaj called 'The wine of kings and the king of wines' that the region, in addition to being able to meet the highest requirements, at the same time also serves the consumer groups less particular about quality.

In the small regions of Miskolc and Tiszaújváros, 'tourism supply' falls far below their economic performance. The capital required for developing tourism may partially come from internal sources. In the small region of Tiszaújváros the effects of the development realised a few years ago have come to fruition. The development level of the tourism sector, however, continues not to justify the appearance of external investors in great numbers. The best chance for maintaining growth is seen in developing the services and attractions connected to the river Tisza, for the industrial character of the region is likely to disturb 'through traffic' to a smaller degree. Developments necessary for further growth can primarily be expected from the local government of Tiszaújváros. The small region has well defined basis on health tourism. It can be further developed by the Virtual Health Research Centre working at the University of Miskolc.

The role of tourism in the economy in the small region of Miskolc is low in spite of the fact that, following the small region of Eger, in Northern Hungary the largest number of guests arrives here. This results from the relatively large population of the small region. The economic force resulting from being the centre of Northern Hungary exceeds the level of 'tourism supply'. The author is of the opinion that mainly developments requiring smaller investment may come from internal sources. Tourism has been stagnating since the mid-1990s; investments that will put the region on a higher growth path may be implemented mostly from central funds, via project applications. In the small region – although there have been steps in a positive direction in the past years

– the number of high-quality accommodation is still low. Tourism experts in the region often express the opinion that there is a need for some 4-5-star hotels with a large accommodation capacity, which would meet the requirements of conference tourism and also act as starting points of tours exploring the tourist attractions of the region. The small region has a great number of hidden natural and cultural beauties and assets. Their mapping and exploitation for tourism purposes may contribute to an increase in tourist traffic.

The small region of Sátoraljaújhely, with its about average ‘economic activity’ and above average ‘tourism supply’, forms its own ‘group’. Its tourism development, which seems to have come to a stop in the past 4-5 years, makes it probable that it is not yet possible to increase the number of tourists significantly without the continuous involvement of external funds (primarily from projects). Only developments with smaller volumes and necessary for the development of tourism may originate from small region funds. Its exceptional natural potentials and the colourful man-made and cultural heritage provide sound foundations for the implementation of development projects using mainly project funds. Careful, consequent and persevering tourism development has produced outstanding results in some villages and towns (Sátoraljaújhely, Füzér and Pálháza). It is necessary to widen the supply of commercial accommodation in addition to rural/village accommodation in the region.

The small regions of Gyöngyös and Sárospatak have about average economic opportunities and about average ‘tourism supply’. The small region of Sárospatak is in a period of intensive growth, and that of Gyöngyös is in one of slight decline. Only smaller investments can be expected from internal resources, the small regions count on central regional development funds for initiating and maintaining growth.

The small regions of Salgótarján, Balassagyarmat, Kazincbarcika and Hatvan have about average ‘economic activity’ matched with below average ‘tourism supply’. Their low level tourism performance is stagnating, or shows signs of decline. The funds for tourism development of smaller significance may come mostly from internal sources. The small regions will have to identify the narrow development areas which carry the opportunities for sustainable tourism growth (e.g. the villages in the particularly scenic areas at the foot of the Bükk Mountains in the small region of Kazincbarcika). No increase in the importance of tourism can be expected without a systematic cooperation of the local governments and small region centres.

The ‘tourism supply’ of the small regions of Bélapátfalva, Pétervására, Abaúj-hegyköz and Füzesabony exceeds their economic opportunities by far. The small region of Abaúj-hegyköz is in a period of rapid growth, while that of Bélapátfalva is in that of a slowing growth. The small regions of Pétervására and Füzesabony show signs of decline. The funds for further tourism development may almost exclusively come from external, primarily domestic sources. The limited resources of the local governments and the small number

of highly qualified professionals present limitations in winning project funding. Further results can be primarily expected via projects encouraging and supporting investments and promoting the tourism potentials of the small regions.

The small regions of Mezőkövesd, Rétság and Szécsény have, as compared to the previous group, less significant 'tourism supply' and somewhat more favourable economic potentials. The small region of Mezőkövesd is in a period of dynamic development, that of Rétság in one of 'revival' and that of Szécsény in one of decline. The small region of Mezőkövesd is moved by its 'tourism supply' along a growth path of 'B' type, while in the other two cases the regional importance of tourism is less significant. It is the small region of Mezőkövesd that can primarily count on the project funds necessary for maintaining the development, and in the other two cases the location in the vicinity of Budapest and a greater exploitation of the world heritage site may bring results. The small region of Mezőkövesd should increase its area of attraction within and outside of the regions, by building on its excellent accessibility.

The small regions of Heves, Mezőcsát, Bodroghöz, Szikszó and Encs belong to the laggards of the national ranking on the basis of their economic potentials. Their 'tourism supply' and performance are negligible, which furthermore is coupled with decline. There is little chance for a regional level development of tourism. The small regions of Mezőcsát and Heves, which can build on their excellent accessibility, the vicinity of Lake Tisza and the thermal waters, are in the best position among them. The funds for tourism development may come almost exclusively from outside the regions. In the author's opinion, only isolated developments can be counted with. For the majority of the towns and villages in these small regions it is worth looking for other driving forces of development/growth.

In the small regions of Bátortereny, Pásztó, Szerencs, Edelény and Ózd 'tourism supply' and economic performance are both well below average. Tourist traffic is negligible as compared to the number of inhabitants, and processes of marginalisation have prevailed for many years. Apart from some exceptions (e.g. Edelény), no major tourism investments can be expected either from internal or external (private or public) sources. In the case of tourism developments, special attention is to be paid to satisfying the criteria of sustainability. The small region of Szerencs does not deserve to be among the laggards, its villages belonging to the Tokaj vine-growing region and the man-made and cultural heritage of Szerencs should justify tourism development. Development of the accommodation supply in the small region is also justified, particularly in the core area of the world heritage site. In the majority of the villages in the group it is difficult to justify the development of tourism; it is more expedient to look for factors of regional development/growth in other areas.

5. SUMMARY

Today there are a number of regional development and tourism development plans available both at regional and small regional levels. The existing documents show significant differences in their professional foundations, and the nature and accuracy of the objectives set. Although these documents are registered by VÁTI Magyar Regionális Fejlesztési és Urbanisztikai Nonprofit Korlátolt Felelősségű Társaság (Hungarian Regional and Urban Development Non-Profit Limited Company), it does not make them available in electronic form to the general public.

The Institute of Global and Regional Economics of the University of Miskolc has been collecting the planning documents involving the region of Northern Hungary in the 'REGISTAR' decision preparation support system of public administration since 2007 and makes them available to researchers and regional development experts. Currently only a small professional circle is well-informed about small region development conceptions, the realisation of which is hindered by the fact that they are not sufficiently known among the potential 'implementers'.

The realisation of small region development plans is accidental. The contents of small region action plans resemble brainstorming ideas rather than the registration of projects effectively implemented. The subsequent evaluation of plans 'implemented' does not take place in practice.

The planning documents of small region tourism development have led to the conclusion that small region concept plans, strategies or their objectives and priorities offer little information in their present forms to the (potential) parties involved. The exploration of tourism performance and the clear quantification of the objectives set are essential for efficient planning. The positioning of tourism performance can be assisted by placing the small regions on the destination lifecycle curve. Positioning (small) regions according to the dimensions of 'tourism supply' and 'economic activity' may contribute to formulating realisable and sustainable development directions.

In the region of Northern Hungary, 12 small regions have effective planning documents explicitly covering tourism development at present. In the other small regions, the objectives and conceptions relating to tourism have been included in documents under a variety of titles (strategic and operative, agrarian structure and rural development, convergence-development, economic development, complex development, rural development, integrated regional-rural development).

The examination of (tourism) development plans involving small regions has resulted in establishing that their contents, extent, professional foundations and objectives are extremely heterogeneous.

Table 2

Characteristics of the objectives of tourism development in small regions

Characteristics of objectives of tourism development	Small regions (given by their centres)
No specific indicators of the objectives are given.	Abaúj-hegyköz, Bátorterenye, Füzesabony, Mezőcsát, Miskolc, Ózd, Pásztó, Rétság, Salgótarján, Szikszó, Tokaj
Partially determined specific indicators of the objectives are given	Mezőkövesd
The indicators of the objectives are not quantified	Bodrogek, Edelény, Encs, Gyöngyös, Hatvan, Heves, Pétervására, Szerencs
Partially quantified indicators of the objectives are given	Balassagyarmat,
Accurately defined indicators of the objectives are given	Bélapátfalva, Eger, Kazincbarcika, Sárospatak, Sátoraljaújhely, Tiszaújváros

Source: author's own work based on the planning documents of the small regions

The majority determine the strategic objectives of tourism development on the basis of situation analyses and regional SWOT analyses. Specific programs are not formulated in every case, a clear formulation or quantification of the objectives is even less frequent (Table 2).

Analyzing the planning documents has led to the conclusion that their situation analysis parts are prepared from a specific internal point of view. It is typical that there are no comparisons with other regions. In the majority of cases the possible internal or external sources of the funds for the developments are not frankly presented.

References:

1. Magyar Turisztikai Hivatal: Nemzeti turizmusfejlesztési stratégia 2005-2013. <http://itthon.hu/szakmai-oldalak/strategiai-dokumentumok/nemzeti-100112>, 2010-05-06 (Hungarian Tourism Office: National Tourism Development Strategy)
2. RMC Regionális Marketing Centrum Kft. 2006: Észak-magyarország régió turizmusfejlesztési stratégiája 2007-13. Miskolc, 118 p. (RMC Regional Marketing Center: Tourism Development Strategy Of North-Hungary 2001-2013)
3. Hirschman A. (1964): "The Paternity of an Index". The American Economic Review, Vol. 54, No. 5, 761 p.
4. Tóth G. (2009): Kísérlet a regionális turisztikai GDP becslésére Magyarországon. Statisztikai Szemle, 87. évf. 10-11. sz. pp. 1038-1057. (An Attempt of Estimating the Regional GDP in Hungary)