GeoJournal of Tourism and Geosites Year **VIII**, no. **1**, vol. **15, May 2015**, p.**94-106**
ISSN **2065-0817**, E-ISSN **2065-1198** Article no. **15108-175**

WATER-BASED TOURISM AS REFLECTED IN VISITORS TO HUNGARY'S LAKES

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Abstract: Beaches are the most popular destinations in the world. As Hungary has a lot of surface water, it is excellent for lake tourism. The main purpose of our research is to show the developmental trends of Lake Tisza and Lake Balaton. How they managed to increase the number of visitors and how they managed to overcome the difficulties which affect tourism? The state of development of the study areas was quantified by the Bennett Index. We confirmed these results by correlation analysis. In the case of Lake Tisza nearly the same level of development can be demonstrated as with the study area at the Balaton.

Key words: lake tourism, Hungary, Lake Balaton, Lake Tisza, developmental trend

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INTRODUCTION

All lakes provide different possibilities which can be exploited, depending on their absolute location (i.e. their geographical position, which in turn determines the climate), on their relative situation (i.e. their distance from other tourist destinations), on their formation (which influences the area and the depth of the lake), and also on the ecosystem (i.e. the presence of economically valuable or protected species) (Newsome et al., 2002). In many cases, experts must consider the water both as a habitat and as an exploitable asset in a very careful way. For instance, water sports can often destroy the

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water ecosystem and also, indirectly, its popularity as a tourist destination (Jennings, 2007). In most cases lakes are considered recreational areas in the countryside; however, many countries have natural or artificial lakes in (or around) cities and towns which are also suitable for recreation (Hall & Härkönen, 2006). These types of lakes also require appropriate treatment.

In Europe, and also in Hungary, tourism is considered as a means to escape from economic recession and one possible approach includes the exploitation of lakes. According to Horváth Z. (2011) a lake becomes a tourism destination if it is visited by tourists; prior to this every lake is just a body of water, which is only relevant as a component of the physical environment and from the perspective of the local inhabitants' social and cultural traditions. Consequently, the first step is to make the target in question widely known - a marketing strategy is needed. However, the popularity of lakes is influenced by other factors independently of marketing intentions: the climate and the geographical and economic environment are also important elements in these destinations' popularity.

The climate zone of a lake is also considered a significant factor for lake tourism (Lin & Matzarakis, 2008). The climate has a great effect on the temperature of lakes and their flora and fauna and also on the water temperature, which is not a negligible factor for bathing. The climate affects the seasonality of visitors, too. It is not only lakes with a warm climate which are the most visited; lakes in high mountains are also popular because of the surrounding scenery (e.g. the Alpine Lakes). However, the areas which have the highest density of lakes and are situated in a cold climate zone, such as Finland and Canada, have no significant lake tourism (reasons are detailed in Vuoristo, 2002). Furthermore, lakes in semi-desert zones, which are often periodic and have salt water, are not very popular as target destinations. In contrast, the lakes of Central Europe are favoured places of recreation (Lake Boden, Lake Maggiore) (Dávid & Baros, 2007; Dávid et al., 2011). In terms of the predicted effects of climate change, several researchers have already dealt with this phenomenon and its effect on tourism (Tervo, 2008; Scott et al., 2005).

Economic geography factors also influence demand for lakes; for instance, the economically active areas around lakes, such as busy cities, are significant attractions. Lake Boden, which is situated on the border between Switzerland, Austria and Germany, is an excellent example of this, since its height above sea level - 400 m - makes it very popular among tourists (Horváth, 2011). The areas surrounding lakes are often cultural destinations, too, so this aspect is also used for marketing purposes. Furthermore, the Mazuri Lakes can be mentioned because they feature scenic and historical sites, such as German castles or Hitler's command post (www.eurorest-hotels.com). In many cases lakeside pop or rock music festivals are held around the lakes (e.g. Balaton Sound and Abádszalók Summer in Hungary, or similar events in Turkey and Switzerland). The physical and economic surroundings of the lakes also have an influence on the tourism infra- and superstructure established on their shores (accessibility, the quality and quantity of accommodation, other suppliers; Dredge, 2001), although changes arising from the increased number of tourists can be detrimental (Hiltunen, 2007). In the case of Lake Balaton (Hungary) this has meant the large-scale erection of offshore camping sites. A European Union survey showed that of different types of accommodation camping sites make up 15% on average in the European Union. The Central Transdanubia Region in Hungary is a good example; here camping sites provide 22.3% of the total accommodation offered, thanks to the proximity of the Balaton. In other countries, however, the ratio of camping sites (Bulgaria, Romania and Slovakia) hardly reaches 5% (Demunter & Dimitrakopoulou, 2010).

Water is the formative factor in a region. In lake destinations the natural and anthropogenic effects develop together, forming one functional unit (Csorba, 2000), since there are only a few water areas around the world where mankind has not intervened in

some way. The degree and direction of human intervention largely influences the formation of the lake, and so they also determine the direction tourism takes. According to Kokkonen (2003), the destination is "the component of tourism supplies which are established in an area for functional reasons".

If the interaction between people and nature is in harmony in the area, it can be considered a system in good working order. Lake Fertő (Hungary), as a good example of this, was listed as a UNESCO World Heritage site in the cultural landscape category (www.fertotaj.hu). For those cultural landscapes in which the sole component of landscape formation is an open water surface, the degree of human intervention encounters barriers (Constable, 2007; Dávid & Baros, 2007) but the use and inappropriate maintenance of the surrounding area (for example, if the sewerage treatment is not developed, the garden traps are incorrectly isolated or not isolated at all, or the angling jetties are built without permits) can involve further danger. For instance, the whole water area can be polluted.

Consequently, lakes themselves are only potential tourist sites, rather than actually existing demands. Their existence and development are influenced by their environment (Hall & Härkönen, 2006). Demand mainly depends on which factors are considered by tourists when they choose their travel destinations. However, lake destinations, if they grasp the opportunities offered to them, can market themselves with an abundance of tourism facilities because a lake destination can be a paradise for sports-fans (swimming, water-skiing etc.), ornithologists and for those seeking "aqua-experiences" (bathing, water-chutes, water-banana, boating, sailing).

Our aim was to examine Lake Tisza as the most recent representative of Hungarian lake tourism from the following perspective. How well is it suited to be an independent region (Lake Tisza Tourism Region)? What developmental progress has it experienced in lake tourism? How can it compete – if this is possible - with Lake Balaton?

DATA AND METHODS

Study sites

Our study areas include the lake shore settlements of the territory around Lake Tisza and Lake Balaton. The settlements involved in our research are the shore settlements because the most attractive element is the lake itself and not the features in the surrounding areas. Excellent examples of this second type of settlement are Karcag and Tiszaújváros (Eastern Hungary). The former, as "the capital of Nagykunság" is popular because of its kurgans, the latter for its sports centre and thermal bath and not for the lake itself. In the case of Lake Tisza, the twelve settlements around the lake were chosen as study areas (Figure 1).

Our other research area was the Balaton, which is well-known throughout Europe as a recreational area. We wanted to find settlements in the Balaton Tourism Region which are similar to those in Lake Tisza in their tourism demand, as well as in their renown, population, settlement hierarchy and physical environment. Thus twelve settlements on the northern shore and a further twelve settlements on the southern shore were included in our research. In order to investigate possible differences between the demands of the northern and southern shores the settlements of the north and south were examined separately (Figure 1). Our lakes, together with their background settlements, form tourism regions. Of the nine Hungarian tourism regions the visitor numbers for the Lake Tisza Tourism Region are the lowest (Figure 2). The Balaton Tourism Region is the second in terms of visitor numbers, only preceded by the Budapest–Central Danube region. Its main towns (Siófok, Balatonfüred) are among the most visited in Hungary (www.itthon.hu). In the following we survey the features and characteristics of, and the similarities between, Lake Tisza and the Balaton.

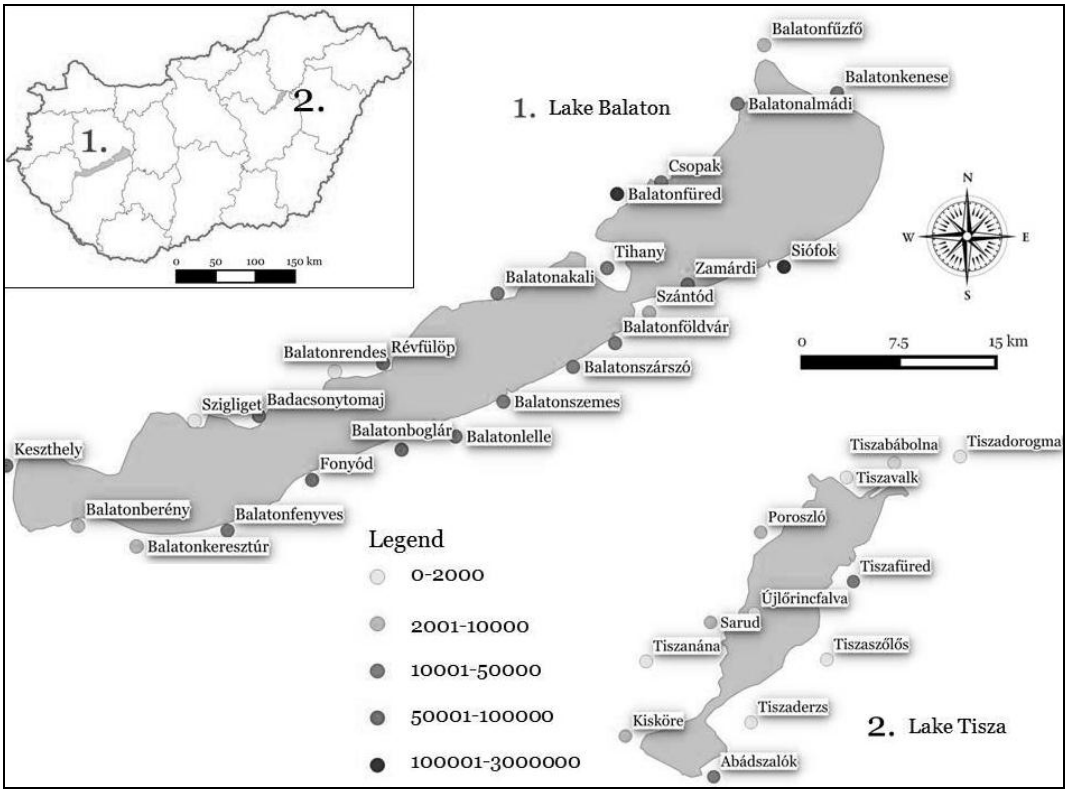

Figure 1. The settlements studied at Lake Tisza and Lake Balaton based on the number of visitors in 2010 (Source: Own construction, based on the Central Statistical Office)

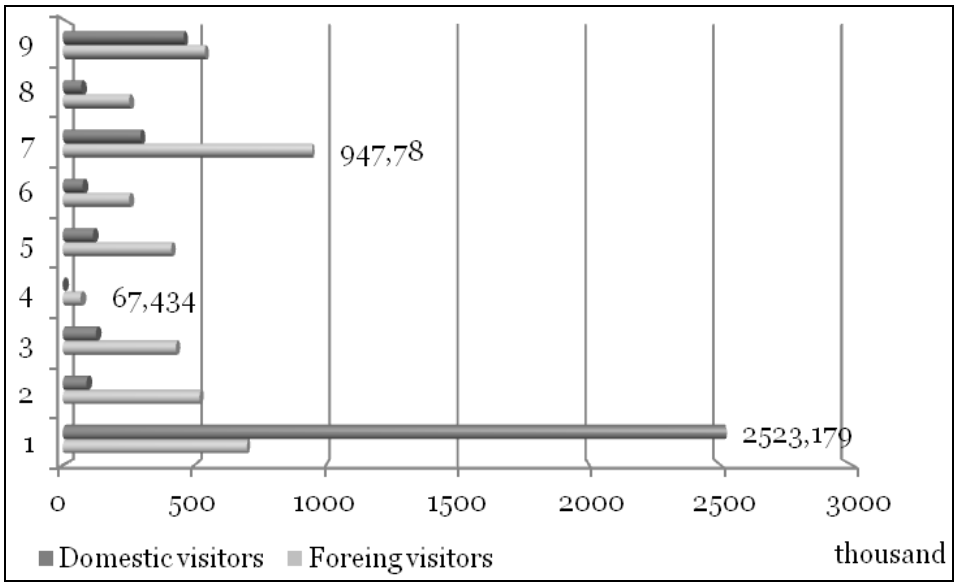

Figure 2. The number of domestic and foreign visitors in tourism regions
1. Budapest and Central Danubian Region; 2. Northern Hungary; 3. Northern Hungarian Plains; 4. Lake Tisza-tó; 5. Southern Hungarian Plains; 6. Lake Balaton; 7. Central Transdanubia; 8. Southern Transdanubia; 9. Western Transdanubia (Source: Own construction, based on the Central Statistical Office)

In several cases tourism marketing uses names which arouse our interest in the tourism attraction on offer. Slogans describing the Balaton as 'the Hungarian Sea', or Lake Tisza as 'the Balaton of the Great Plain', are already well-known. However, most tourism experts, such as Michalkó, G. (2005), think there is no point comparing the Balaton and Lake Tisza in terms of tourism geography. From the quantitative and qualitative results based on research into Hungarian lakes it is also clear that the Balaton and Lake Tisza cannot be placed in the same category to satisfy some trivial rivalry between them (Sulyok, 2010).

Table 1. Main characteristics of the lakes studied

Subject	Lake Tisza	Lake Balaton	References
Area, age, formation	127 km², 35 years, artificial lake	594 km², 5000 years, tectonic origin, natural lake	Szilassi, P., 2002; Martonné, E. K., 2004; Marosi, S., Szilárd, J., 1981
Location	Eastern Hungary	Western Hungary	
Temperature	Hot and dry summers, warmer water temperatures	Positive temperature anomaly	Bodnár, R. K., 2008
Natural reserves	Ramsar area, World Heritage area (Tiszafüred Bird Reserve)	Ramsar area	bfnp.nemzetipark.gov.hu; www.info-tourist.com
Anthropogenic effects	Agriculture, cyanide and heavy metal pollution	Cultivated land, fertilizer, eutrophication, soil degradation, Little Lake drainage, sludge formation	Vasvári, M., Dávid, L. Szabó, Sz., 2011; Föstös, G., 2008; Jordán, G.Van Rompaey, A., Szilassi, P., Csillag, G., Mannaerts, C., Woldai, T., 2005; Van Dessel, V., Van Rompaey, A., Poelmans, L. Szilassi, P., 2008 ; Bora, Gy. Nemerkényi, A., 1999
Economic environment	Economic dichotomy (negative balance) Tourist infra- and superstructure undeveloped	Economic dichotomy (positive balance) Tourist infra- and superstructure developed	Pénzes, J., 2010
Effect area	catchment, individual tourism regions, economic geography - four counties and two statistical regions	Geographical water-catchment area, individual tourism regions, economic geography - three counties and three statistical regions	Buday, Sántha, A., 2008
Availability	A main road (33), the railway line (between Debrecen and Eger)	Main roads (7, 71), Highway (M7, E71), rail access to every point of the lake (main line between Budapest Nagykanizsa)	Tóth, G., Dávid, L., 2010

We agree with these statements, and the purpose of our research is not to examine the lakes as mutual rivals but to analyse them on the basis of their particular

developmental tendencies and, at the same time, to demonstrate the place of Lake Tisza in relation to the larger and better known tourism destination. The geographical position (Figure 1) and the socio-economical environment of the lakes differ widely (Table 1), so their comparison would not be valid.

People around the world identify Hungary with the Balaton, and in this sense the renown of Lake Tisza is insignificant. Our results for Lake Tisza would have been descriptive and would not have given an authentic account of its degree of development. Thus, the Balaton settlements were included in our research and this data acts as a base for comparison to help our research and also readers of this article.

From the list above it can be stated that the features of the lakes are difficult to compare (age, physical features, economic character, etc.) but in many areas there are similar parameters (lake character, water habitats – nature reserves, anthropogenic risk, climate factors, the functional division of administrative units, the local authorities, the council which supports the environment of the lake etc.).

Methods

Due to the differing aspects of the areas – above all in terms of their economic characteristics - the exploration of the state of development of local conditions was considered important. To achieve our goal we applied Bennett's complex index (Bennett, 1951) as an indicator of regional development. Indices were calculated as the unweighted arithmetical mean of the variables, where values were expressed as a percentage of their maximums by region. Among the index components (r) we chose the density of population and the number of hotels, and private rooms and other accommodation.

The degree of local development can be described by this index. The index counts of each settlement were calculated from the values normalized with the maximum of the annual data for every single study area. Relating to each study area and every examined year the following calculations were made.

Based on the components of data for 12 settlements belonging to the single study area the highest value was considered to be 100%. The other values were calculated in relation to this. Then, for each single settlement we added the values for the 4 components $(\mathbf{B_i^{year}})$. The Bennett's indexes of the examined area related to the given year are determined by averaging the totals (B_{year}).

$$B_{\downarrow}i^{\uparrow}year = \sum_{\downarrow}(j=1)^{\uparrow}r \equiv (x_{\downarrow}(i,j)^{\uparrow}year)/\max\{x_{\downarrow}(i,j)^{\uparrow}year \mid i=1,\dots,N\}$$

$$B_{year} = \frac{\sum_{i=1}^{N} B_i^{year}}{N}$$

Where:
N=number of settlements (12)
r= number of components (4)
i=ith settlement
j=jth component

$$B_j^{\acute{e}v} = \sum_{j=1}^{N} \frac{x_{i,j}^{\acute{e}v}}{\max\{x_{i,j}^{\acute{e}v} \mid i=1,\dots,N\}} \quad B_{\acute{e}v} = \frac{\sum_{j=1}^{N} B_j^{\acute{e}v}}{N}$$

To determine the factors which affect the number of visitors, we carried out correlation analysis using SPSS 15 (SPSS Inc., Chicago IL). The calculations were made separately for the whole data set and for the data for each single area.

RESULTS

Visitors to Lake Tisza and Lake Balaton

Our research mainly focused on changes in the number of guests, and on the parameters which influenced these changes. Our prime factor was provided by the number of guests between 1990 and 2010 (Figure 3). The data showed the turnover of businesses offering commercial and private accommodation in the settlements we selected – 12 from Lake Tisza and 12+12 from Balaton. The data for accommodation offered by non-registered businesses and for visitors who came for a single day had to be left out of consideration because their numbers only can be roughly estimated.

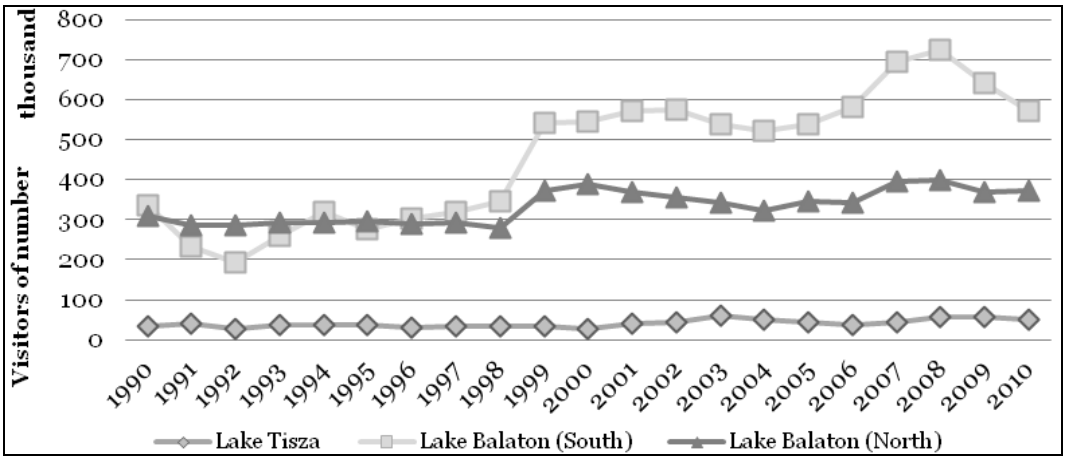

Figure 3. Data based on the number of guests in the settlements studied between 1990–2010 (Source: based on the Central Statistical Office)

Lake Tisza

Lake Tisza was less-visited by tourists but their numbers were more balanced than in the case of the Balaton. During the last two decades the average number of guests was 40,651. The lowest number of guests was recorded in 1992 (20,631); the maximum in 2003 (59,467), and the relative standard deviation was 23.3% considering the total number of guests in the examined period. However, taking into consideration the guest numbers according to settlements and periods, we can observe a significant difference in relative standard deviations (Table 1).

We calculated this value for 1990 and 2010. It indicated a spatial heterogeneity among the settlements, since the higher the relative standard deviation, the higher the lack of homogeneity in the distribution of the guests. During this period the differences in standard deviation increased from 63% to 156%. The number of guests in each settlement was more or less steady until 1995. Thereafter, the guest-nights for Tiszafüred and Abádszalók showed outlier values due to a deviation in a positive direction, so they took precedence over all the other settlements. These two settlements played the most significant role in the tourism of Lake Tisza, since they provide a wider variety of recreational possibilities.

Lake Balaton

Over the twenty years, statistics for guest-nights on the northern shore of the Balaton showed a 12.4% relative standard deviation. The average number of guests was 333,372. The lowest number of guests was in 1998 (280,534) and the highest in 2008 (398,956 persons). The relative standard deviation by settlement was 1.33 in

1990 and 1.28 in 2010. This value indicated that the distribution of the guests varied widely, emphasizing the relevance of Balatonfüred. Nevertheless, this heterogeneity did not increase in this period. The average number of guests on the southern shore of Lake Balaton was 458,641 and the relative standard deviation of this area was the highest at 35.4%. Considering data by settlement, the relative standard deviation was 83% in 1990, while it was 144% in 2010. This, and the chart shown in Figure 3, also showed that the fluctuation in the number of guests was the largest on the southern shore of Balaton. Thus, the local providers found it difficult to estimate the expected number of guests. Examining the combined data for the Balaton, the relative standard deviation in guest numbers was 23.6% over the twenty year period. Of the settlements studied, Balatonboglár and Siófok had the highest number of guests compared to the others.

The number of visitors to Lake Tisza was 33,257 in 1990, but this number increased by 49.7% in 2010 (49,796), so it was nearly one and a half times what it had been twenty years previously. The southern shore of Balaton managed to achieve a 70% increase (336,257) in 1990, but demand for the northern settlements only showed a 20% increase based on the registered data for commercial and private accommodation. The conspicuous increase for the southern shore was related to the fact that the lake on this shore gets warm sooner because it is shallower, thus it is more popular among families and in summer more light music festivals attract tourists (Zamárdi, Siófok). Examining the combined data for both the northern and southern shores of Lake Balaton it can be stated that the number of guests was 645,107 in 1990, but the number of registered visitors had increased by 46.3% by 2010. Based on this data, the increase in tourist traffic at Lake Tisza was 3.4% greater over twenty years than it was at the Balaton.

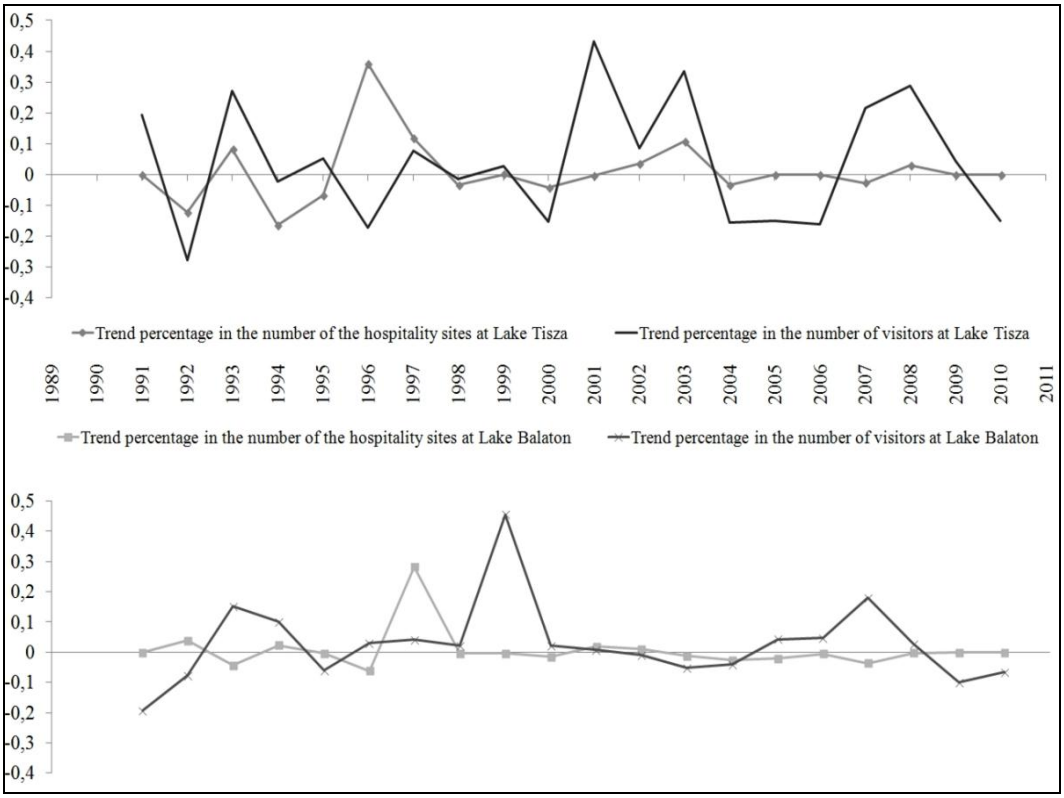

Figure 4. Trends in the percentage of the Bennett number of accommodation sites and guests (Source: based on the Central Statistical Office)

Bennet's index

Bennett's index was applied to determine further factors which influence the trends in guest numbers. Based on our calculation, the development of the total index-number was influenced by the number of facilities of the index components. The Bennett number of the facilities and the percentage growth rate of guest numbers were compared. From the charts it appears that the change in the number of facilities and guests follows each other in an annual shift (Figure 4).

Bennett's index as a tool for identifying factors biasing visitor numbers

Bennet's index showed a strong correlation ($r=0.79$, $p<0.05$) between the number of guests and accommodation sites. In the case of the settlements around Lake Tisza this comparative relationship was much stronger, with a value of 0.838 ($p<0.001$). For the northern shore of the Balaton the value of $r=0.741$ ($p<0.001$) showed a weaker relationship but was still considered a significant factor. For the southern shore we also found a high value of 0.855 ($p<0.001$).

The correlation between the number of tourists and hotels was also considerable. The number of hotels had the largest influence in all three areas, as was also shown by the 0.870 correlation coefficient. At Lake Tisza the correlation recorded ($r=0.545$) was weaker (which can be explained by the low number of hotels), but the results for the northern ($r=0.881$) and the southern ($r=0.811$) shore of the Balaton followed the results for the total study area.

The next statistic of interest was the regional correlation coefficient between the trend in the number of guests and Bennett's index: for Lake Tisza this was 0.839, for the northern Balaton 0.869, and for the southern Balaton 0.813. Based on these results it can be stated that the degree of local development in all three areas had a significant influence on the trend in guest numbers and vice versa. In the area of Lake Tisza nearly the same level of development can be observed as in the sample area at the Balaton.

DISCUSSION

Examining the tourist traffic data for Lake Tisza, the first period of stagnation occurred in 1992. The low point following the political changes of 1989 was marked all around the country and can be explained by a reduction in both salaries and free time (Michalkó, 2008). The next decrease in tourist numbers was in 1996. The data shows that domestic visitors turned away from the lake, a phenomenon which we are unable to account for. Several factors might influence this drop in popularity, including the fact that the increase in salaries allowed more and more families to visit the Balaton. In addition to this, due to the decreasing erosion as a result of the afforestation in the catchment area and the rehabilitated filter function of the Kis-Balaton wetland (Buday-Sántha, 2007; Jelenka, 2008), the water quality of the Balaton was also improving.

At that time the number of foreign visitors (6397 persons) showed no change in relation to 1994 (6615 persons) and 1995 (6433 persons). At the same time, the political changes had a positive effect on all countries in Europe, so while in the 1980's tourists from Eastern and Western Germany met in Hungary, especially at Lake Balaton, after 1990 they were able to meet anywhere (Gertig, 1985). This was reflected in the data for guests from other countries: their number decreased to a half of what it had been 20 years before. Similarly, the number of foreign guests at Lake Tisza was 2.3 times higher in 1990 than in 2010. This proves that it was not only the Balaton that was known to the German public, but it was also the case that the relevance of Lake Tisza was significantly smaller.

Lake Tisza suffered its next decrease in guest numbers in 2000 due to cyanide pollution (Fleit & Lakatos, 2003). It was mainly the number of anglers which fell, but this negative reputation affected the entire tourist sector at Lake Tisza. After the

cyanide pollution episode there were fewer visitors, not only to Lake Tisza but to each destination along its shore, too. The number of visitors in the regions (in the settlements of Hajdú-Bihar County) far from Lake Tisza increased noticeably, by 15.6% (Prommer & Skwarek, 2001). The proportion of foreign visitors was 6% in 1990, but had fallen to 0.4% by 2010.

However, the significant changes in Lake Tisza's tourism were not only negative. Both the decline in 1995 and the significant increase in 1999 were attributed to political conflicts in neighbouring countries. The former was the result of the Bosnian war; the latter as a consequence of the Kosovo conflicts. During that period more visitors came to the Balaton instead of more uncertain target destinations, such as the Adriatic. The peak in the number of guests in 2008 was linked to the opening of the Balneum Hotel and the Spa Center in Tiszafüred.

This became the highest quality accommodation around the Lake Tisza area. After the slump of 2008 the number of guests at Lake Tisza hardly decreased. Moreover, due to the lower cost to value relationship guests could afford to stay around the Lake. From 2010 the number of guests decreased at Lake Tisza but not to such a large extent as at the Balaton. The decline of Lake Tisza in terms of guest numbers was 11% for 2010 compared with 2008, but in the same period at the Balaton this figure was 27%.

Our results from the Bennett index were also justified by the results obtained by correlation calculations. Accordingly, if tourists appear in an area, accommodation will be soon established to serve them. The tourism superstructure attracts many more visitors which increases the establishment of tourism enterprises in the given area. If, however, the number of guests decreases for any reason, the means of subsistence for providers of accommodation becomes uncertain and impossible and these sites are either closed down or converted. However there are cases when a new service component appears in a destination and manages to generate an increase in the number of guests in a short time. This statement is particularly true for our study areas.

This observation is not new, as several authors have previously researched the life of tourism areas and their development (Butler, 1980; Martonné, 2008, Milne & Ateljevic, 2010). Several other factors can influence the trend in the number of guests. For example, one of them is the attractions on offer in the area. Determining their appeal is a subjective judgement, but their attractive force must be mentioned. We also conducted correlation analysis in relation to quantifiable data, which can influence the demand of an area (Table 2).

Table 2. Relationship between the number of guests and the influencing factors studied, 2006–2010 (Pearson's correlation, N=~30, $p<0.05$)

	Lake Tisza-tó			**Balaton (north)**			**Balaton (south)**		
	All	Domestic tourists	Foreign tourists	All	Domestic tourists	Foreign tourists	All	Domestic tourists	Foreign tourists
Area of the settlements (ha)	0.89	0.90	0.72	0.44	0.47	0.37	0.86	0.85	0.83
Number of the inhabitants	0.89	0.87	0.93	0.65	0.63	0.65	0.95	0.94	0.93
Tourism income of the local authorities	0.89	0.89	0.67	0.91	0.92	0.86	0.88	0.85	0.90

A close relationship between the territorial extent of the settlements and the number of visitors to the lakes can be shown for Lake Tisza and the southern part of Balaton. One probable reason was that the physical environment of the two shores was nearly the same. There were only a few densely urbanised territories, the typical pattern being houses with gardens, and large, open shore areas dissecting the lakes. Furthermore, in most cases a larger a settlement meant a larger population. We observed what we

consider a strong relationship between the numbers of the local population and guests. In the case of Lake Tisza this relationship was very strong for foreign guests, but on the southern shore of the Balaton it had a similar significance for both domestic and foreign tourists. This can be explained by the fact that the urban regions were the most complex tourism destinations, and so they had a wide range of tourist facilities. The larger population created better infrastructure, but tourism developed the superstructure, which increased the demand of highly-populated regions.

These locations were mainly mass tourist destinations (Michalkó, 1999). On the northern shore of Balaton neither the territory nor the population was correlated with the number of guests (Table 2). In all three study areas there was also a strong relationship between the tourism incomes of local authorities and the trend in the number of guests. The higher the number of guests the larger the income, but the same is also true in reverse; the expected effect will appear if the local authorities assign this income to tourism development. It was common for popular tourism locations (the centre of the settlement, resorts, beaches, etc.) to be developed, but for other areas of the settlement not to receive similar investment. Thus, the image of the settlement may be distorted in qualitative and/or functional respects (Martonné & Szilágyi, 2008), although a detailed examination of this issue is not part of our research. Our results were in strong agreement with Remenyik et al. (2012).

CONCLUSIONS

Divergent physical, economic and social-geographical conditions characterize our examined study areas, and all influence their tourism development in special ways. We cannot leave out of consideration the history of lake areas in the study of tourism because several researchers have referred to the fact that the lakes can be compared. Therefore, the data for guest numbers from 1990 were chosen and we tracked changes in visitor numbers. In truth, in terms of their tourist facilities and popularity the Balaton and Lake Tisza cannot be rivals, but Lake Tisza's surroundings makes it a significant attraction. As lake destinations a joint examination of them is justified.

The characteristics of our lakes, which have effects on their development paths (Table 1), create difficulties for our lake destinations, and the unexpected economic and physical processes generate further challenges, too. However, as a result of our research it can be stated that the achievements of Lake Tisza proved that it was better able to overcome obstacles. It was able to react better and faster to changes and this could be measured in the number of guests. Based on the number of guests in the areas we studied, and considering the geographical extension and economic situation of the lakes, in 2010 visitors to Lake Tisza increased by 3.4% more than did visitors to the Balaton. In comparison to the 1990s, Lake Tisza has increased the number of guests by 49.7%, while for Lake Balaton the figure is 46.3%.

Examining the trend in the number of guests at Lake Tisza compared to Balaton it seems a state of equilibrium has been reached over the last twenty years. Although visitors to Lake Tisza are fewer, the lake's tourism has been less influenced by the current economic decline, and the service providers of the area can carry out their activities in a more stable environment. Moreover, this stability can boost the intensity of investments. The Tisza Balneum Hotel, built in 2008, is a good example of this, as are one or two other attractions which were opened in 2012, such as Robin Kalandsziget (Robin Adventure Island) in Tiszafüred and the Ökocentrum (Eco-Centre) in Poroszló.

After the loss of visitors in 1992, 1996, 2000 and 2008 Lake Tisza was able to recover and became a popular resort again. The stability mentioned above is also shown by the fact that after the slump in 2008 only an 11% drop in the number of visitors for 2010 was recorded, while at the Balaton this figure was 27%. The results for Balaton were

not only due to the higher cost to value relationship, but also to the carry-over of the recession in Europe and the fact that foreign visitors turned away from the lake. The faster and repeated revitalization of Lake Tisza is linked to the successful cooperation between the organizations which direct tourism around the lake, as well as to an efficient management due to its more compact area, and to the significant motivating factors it offers for tourists (it is unknown, less crowded, cheap and a pro-family resort, etc.) which may justify a comparison with the Balaton. The strong appeal of the Tourism Region of Lake Tisza is considerable, not only in the eastern part of Hungary but among anglers from Slovakia, Romania and the Ukraine. It is outstandingly attractive for those in search of a trip extending over several days.

ACKNOWLEDGEMENT

This paper was supported by the TÁMOP-4.2.2/B-10/1-2010-0024. The project is co-financed by the European Union and European Social Fund.

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Submitted:	Revised:	Accepted and published online
08.10.2014	19.03.2015	21.04.2015