

## SOME SOCIO-ECONOMIC ASPECTS OF REGIONAL DEVELOPMENT AT THE LAKE BALATON

Zoltán SZABÓ<sup>1</sup>, József KOCSNDI<sup>2</sup>, Zoltán LAKNER<sup>3</sup>, Ivan MERLET<sup>4</sup>

<sup>1</sup> Hévíz Governors' Office, H-8360 Hévíz, Kossuth L. u. 1.

<sup>2</sup> Pannon University, Department of Economics and Social Sciences; H-8360 Keszthely, Deák F. u. 16.

<sup>3</sup> Budapest Corvinus University, Department of Food Economics, H-1118 Budapest, Villányi út 35-43.

<sup>4</sup> EPL DE BAZAS Avenue de la République F-33 430 Bazas, France

### **ABSTRACT**

*Lake Balaton is among the most important touristic destinations in Hungary. During the last decades the attractiveness of the Lake has been decreasing considerably. This fact can be explained by exogenous factors (re-organisation of system of Hungarian tourism, decreasing domestic purchasing power, improved accessibility of further destinations) but – at the same time-the lack of strategy and of long-range planning can be considered as important causes of failures. The aim of the current article is to analyse the key actors and their strategies around the Lake. The understanding the structure of net of actors and their interest is an important starting point for determination of basic directions of development on base of consensus-seeking. The most important lesson of the analysis, that the Balaton-tourism should be approached as a complex and dynamic system, which should be adapted to the changing demands.*

(Keywords: decision support systems, social bargaining)

### **INTRODUCTION**

Balaton is the largest see in Central Europe, its length is 77km, its wide is between 1.3-14.0km (in average 7.8km), and its surface is 594km<sup>2</sup>. There are numerous specific aspects of the Balaton geographic region from point of view of history, natural geography, flora and fauna (*Mourato*, 1998), but the most important fact from our point of view is the role of Balaton in Hungarian tourism.

The Lake is the target of 13% of total foreign touristic arrivals to Hungary. Share of Balaton in domestic tourism, estimated on base of guest-nights is 23% (*Hungarian Tourism ZRt*, 2010). During the last decades there were numerous debates on possibilities of development of tourism around Balaton. According to the study of Hungarian Court of Auditors there had been spent between 1990 and 2007 more than half milliard HUF (ca. 2 million Euros) from the state budget to different studies on development of the tourism at lake Balaton (*Báger et al.*, 2008). The only practically realised result of these studies was the introduction of the so-called Balaton Card system. The Hungarian literature of economic geography and regional planning is abundant in concepts on development of the tourism at Lake Balaton. One of the most important lessons of these scientific analyses were the

highlighting of importance of system-based approach to this complex of questions (*Somogyi et al.*, 2002).

The aim of current article is the determination of the most important forces, shaping the system of tourism at Lake Balaton, and the possibilities of formation of a coalition between different social forces with purpose of development of touristic attractiveness of the Lake.

## MATERIALS AND METHODS

The basic paradigms of analysis were the institutional theory (*Berger and Luckmann*, 1966), principle-agent theory (*Eisenhardt*, 1989) and the strategic planning.

Our research has been consisted of two phases. In first phase we have determined the set of key actors, playing a role in development of tourism at Lake Balaton, in second one we have estimated the direct influence-relations between the actors (actor-actor matrices), and in the third one we have estimated the matrix between the actors and the different goals.

Based on these two input-matrices with help of a semi-quantitative analysis it had been carried out an analysis of relations between the actors, and actors and goals (*Godet*, 1996).

According to the basic theory of so-called “French school of strategy” the different social systems can be considered as an arena, in which different groups of participants (the so-called actors) take part with purpose of enforcement of their specific interests (*Godet*, 2000). In opinion of Godet if one can relative adequately simplify the actors and the most characteristic features of their systems of interests, then there is a possibility of analysis the chances of different actors to realise their goals. The method of systematic analysis of social bargaining can be modelled by so-called MACTOR modelling, an acronym for Matrix of Alliances and Conflicts: Tactics, Objectives and Recommendations (*Durance*, 2008). One of the key concept of the model, is that the possibilities of actors to influence other actors are determined by their potential to pressure another actors directly or indirectly with purpose of affect their behaviour. The influence of an actor (A) on an another actor (C), is the sum of the direct and indirect influences of actor A on actor C.

The quantification of mutual influences can be characterised by a rectangular matrix. Cells of matrix – *per definitionem* – reflect the intensity of influence of actor in row on actor in column (*Bendahan et al.*, 2004). The intensity of direct influence on an actor to another was measured on a 0-4 scale, from no influence to absolute influence, determining the existence of the respective actor.

Matrix of direct and indirect influences (MIDI [1]), can be quantified for each par of actors as a sum of direct and indirect influences.

$$\text{MIDI}_{a,b} = \text{MID}_{a,b} + \sum_c (\min(\text{MID}_{a,c}, \text{MID}_{c,b})) \quad [1]$$

In this way of each and every actor can be determined the vector in influences (Ia) and dependences (Da) by equations [2] and [3].

$$I_a = \sum_b (\text{MIDI}_{a,b}) - \text{MIDI}_{a,a} \quad [2]$$

$$D_a = \sum_b (\text{MIDI}_{b,a}) - \text{MIDI}_{a,a} \quad [3]$$

Based on these indicators a normalised value can be determined for each of actors. [4].

$$r_a = \left( \frac{(I_a - \text{MIDI}_{a,a})}{\sum_a (I_a)} \right) \cdot \left( \frac{I_a}{(I_a + D_a)} \right) \quad [4]$$

Using the  $r_a$  vector one can define the matrix of influence-possibilities of each of actors for different issues. [5].

The importance of different goals from point of view of each actor has been expressed by Matrix of Actor-Object (MAO). In this matrix the importance and attitudes of different goals from point of view of different actors were quantified on a -4 ...+4 scale, where the -4 denoted the high importance and total negation of the given goal, and the +4 denotes the high importance and total support.

$$3\text{MAO}_{a,i} = 2\text{MAO}_{a,i} \cdot r_a \quad [5]$$

The 3MAO matrix is the basis of most of the analyses proposed by method of analysis. Indeed, a number of important values are directly drawn from the 3MAO matrix. This is the case of the mobilization coefficient [6], showing how much the different actors are involved in the situation, but also of the agreement [7] and disagreement [8] coefficients, which indicate how controversial are the different issues.

$$\text{Mob}_a = \sum_i |3\text{MAO}_{a,i}| \quad [6]$$

$$\text{Ag}_i = \sum_a (3\text{MAO}_{a,i} \cdot (3\text{MAO}_{a,i} > 0)) \quad [7]$$

$$\text{Disag}_i = \sum_a (3\text{MAO}_{a,i} \cdot (3\text{MAO}_{a,i} < 0)) \quad [8]$$

Furthermore, the 3MAO matrix is used to obtain the convergence matrix (3CAA [9]) and divergence matrix (3DAA [10]). For each couple of actors, these matrixes show how much they agree (respectively disagree) on salient and controlled issues.

$$3\text{CAA}_{a,b} = \frac{1}{2} \cdot \sum_i (|3\text{MAO}_{a,i}| + |3\text{MAO}_{b,i}|) \cdot (3\text{MAO}_{a,i} \cdot 3\text{MAO}_{b,i} > 0) \quad [9]$$

$$3\text{DAA}_{a,b} = \frac{1}{2} \cdot \sum_i (|3\text{MAO}_{a,i}| + |3\text{MAO}_{b,i}|) \cdot (3\text{MAO}_{a,i} \cdot 3\text{MAO}_{b,i} < 0) \quad [10]$$

Finally, the ambivalence coefficient [11] can be calculated for each actor, giving an indication of their expected stability in their potential alliances.

$$3\text{EQi} = 1 - \left[ \frac{\left( \sum_k |3\text{CAA}_{i,k}| - |3\text{DAA}_{i,k}| \right)}{\left( \sum_k |3\text{CAA}_{i,k}| + |3\text{DAA}_{i,k}| \right)} \right] \quad [11]$$

The operationalisation of the methodology was as follows: in first phase we have collected the set of possible actors and the set of possible goals, based on a series of interviews with tourism-specialists in the region. In second phase of investigation in a workshop with participation of seven specialists we have determined the values of

the input matrices. The values of matrices have been estimated on a consensus-seeking way.

## RESULTS

In first phase of investigations the key actors and their strategies have been determined. The set of the most important actors is summarised in *Table 1*.

**Table 1**

**The key actors of tourism development at Lake Balaton (random order)**

County municipalities
Ministry of Finance
Municipalities around Lake Balaton
Non-residents at Lake Balaton
Residents at Lake Balaton
Local small and medium size enterprises related to the tourism
Hungarian government
Financial investors

Analysing this set it is obvious, that the specialists wanted to differentiate between the general policy of Hungarian government and the relatively short-time strategy of financial considerations of Ministry of Finance. Under Hungarian conditions, the county-level municipalities have a relatively low importance of regional planning and public administration. In opinion of Jenei and Szalai (2002) de-centralisation of public administration the key requirements are the stable and democratic constitutional background, the efficient municipal finance system and the well – functioning public administration. Currently the Hungarian constitution is under public debate, and the financial conditions of local municipalities are relatively unfavourable. The share of local municipality expenditures in GDP shows a decreasing tendency. In 1994 this share was 17.2% in 2008 12.3%. There are two basic types of the population around the lake: the residents and the non-residents. The non –resident population consists of people, having weekend houses or cottages at the border of the lake (Járosi, 2006). In the latest years there is an increasing tendency of migration of intellectuals from Budapest or small-bourgeois from Western-Europe to into the villages, situating more fare from the lake. This differentiation seemed to be necessary to express the different attitudes to the local problems. For example the development of infrastructure for education and health-care services are much more important for local residents, than for non-residents. At the same time, e.g. the improvement of accessibility of villages is extremely important for both types of the population.

The financial investors form a specific category. They are not necessarily tourism-specific investors. It should be noted that in some parts of Balaton there are considerable industrial production capacities (Nitrokémia Zrt. Industrial Park) too.

The set of potential goals of different actors is summarised in *Table 2*.

**Table 2**

**Set of potential goals of investors (random order)**

Development of tourism-related infrastructure
Development of non-tourism-related infrastructure
Maximalisation of tax-revenues of state budget
Maximalisation of tax-revenues of budget of municipalities
Sustainability of ecologic environment
Maximalisation of development resources
Development of non-tourism related economic investments
Development of quality (mass) tourism
Development of quantity tourism

In second phase we have estimated the possibilities of influence of different actors on each other (*Table 3*).

After this phase, the attitude of actors towards the different goals had been determined (*Table 4*).

**Table 3**

**Matrix of mutual influences**

(the cells of the matrix indicate the estimated importance of actor in row on the corresponding actor in column on a 0-4 interval scale)

Actors	County municipalities	Ministry of Finance	Municipalities around Lake Balaton	Non-residents at Lake Balaton	Residents at Lake Balaton	Local small and medium size enterprises related to the tourism	Hungarian government	Financial investors
County municipalities	0	1	1	0	1	2	1	1
Ministry of Finance	3		3	2	2	3	1	2
Municipalities around Lake Balaton	2	0		2	3	2	0	3
Non-residents at Lake Balaton	0	0	1		1	1	2	0
Residents at Lake Balaton	2	0	4	1		3	2	0
Local small and medium size enterprises related to the tourism	1	0	2	1	2		1	1
Hungarian government	2	3	2	1	1	2		2
Financial investors	2	1	3	1	1	3	2	

**Table 4**

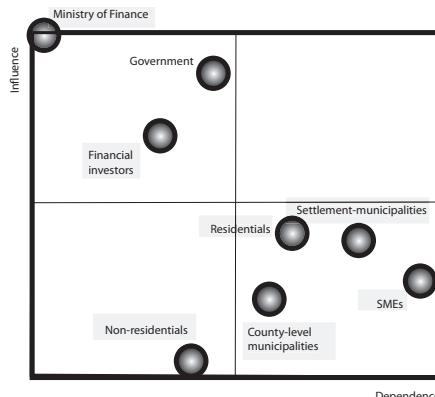
**Matrix of relation of actors to the different goals**  
 (the cells of the matrix indicate the estimated importance of actor in row on  
 the corresponding actor in column)

Actors	Development goals									
	development of tourism-related infrastructure	development of non-tourism-related infrastructure	maximisation of tax-revenues of state budget	maximisation of tax-revenues of budget of municipalities	sustainability of ecologic environment	maximisation of development resources	development of non-tourism related economic investments	development of quality (mass) tourism	development of quantity tourism	
County municipalities	2	1	1	1	-2	2	4	1	1	
Ministry of Finance	1	0	0	4	-4	0	1	2	0	
Municipalities around Lake Balaton	4	4	4	-4	4	3	4	3	3	
Non-residents at Lake Balaton	0	2	1	1	-3	3	1	-2	1	
Residents at Lake Balaton	4	3	4	-4	2	4	3	3	3	
Local small and medium size enterprises related to the tourism	3	4	3	-4	2	3	4	-3	3	
Hungarian government	2	2	1	4	4	2	1	1	1	
Financial investors	1	4	1	-4	-3	1	2	-2	1	

By application of MACTOR method in first phase of investigation we have determined the matrix of dependences and influences (Eq. [2] and [3]). The graphical representation influences and dependences are summarised in *Figure 1*.

**Figure 1**

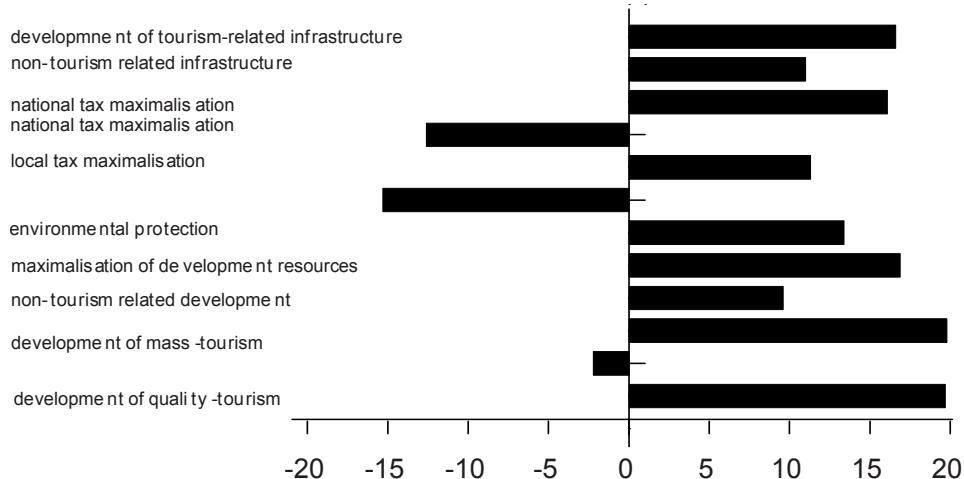
### Matrix of influences and dependences of actors



Analysing the *Figure 1* it is obvious, that the influence of the Financial conditions are extremely high, at the same time the dependence of small-and medium size service providers as well as the local municipalities is relatively low, paired with a high level of dependence. In case of the population there is a considerable difference between the residents and non-residents. Traditionally, a considerable part of the Hungarian middle-and upper middle class had weekend-houses at the Lake Balaton. This fact underlines the importance of searching the possibilities for a more balanced representation of interest of this important group of local actors. The position of county municipalities is an extremely sensitive problem. On one hand, the role and place of county-municipalities is a highly debated issue in the Hungarian public administration. Their influence is relatively low, and – at the same time – they should play an important role in planning and realisation of regional processes. From this point of view, it is an extremely critical fact that villages and towns around Balaton belong to three different counties (Veszprém, Somogy and Zala). The concentration of regional public administrative units into regions (regional planning and statistical units) did not solve this problem, because the surrounding of Balaton belong even under this conditions to three different regions. A possible compromise could be the improvement of functioning of some parallel organs (e.g. Balaton Regional Tourism Committee) (*Figure 2*).

**Figure 2**

**The support of different goals, calculated on base of Eq. 5.**



It is obvious, that in some cases there were antagonistic contradictions between the different goals of different actors.

Some goals, e.g. the creation of workplaces, development of tourism infrastructure and increasing of resources for development can be considered as widely acceptable ones, enjoying a wide-range social support (*Figure 2*). Another

sources, e.g. maximalisation of local taxes considerably divides the actors. The same is true for the local development resources.

The graph of influences and dependencies highlights the extremely high importance of financial organs and the central government. At the same time it is obvious, that the second most important actor in this game, the central government has hardly any coherent concept on tourism development. An obvious proof of this fact is that during the last three decades the organisational structure of the tourism has been changed practically in every two years.

The calculation of convergence of different actors from point of view of different goals shows a considerable deviation. Analysing the Fig. it is obvious, that there are considerable differences between the goals of actors. There are extremely high differences in goals of the most influential actors, and under these conditions one can't expect any converging tendencies.

## CONCLUSIONS

The MACTOR analysis has been proven a suitable method for the determination of socio-economic forces, shaping the tourism-landscape at Lake Balaton. The results highlight numerous contradictions. The most important of these are as follows:

1. The defence of interest of non-residents is an open – ended question, however – parallel with decreasing of industrial and agricultural activities in the region-their role will be increasing.
2. It would be essential to fortify the role of non-governmental organisations in the Balaton-region. These could play an important role in preservation and better utilisation of natural and cultural heritage of the region.
3. The most influential decision-making factor seems to be the political will of the central government, but this actor has not been able to formulate and carry over an adequate strategy for tourism. There are numerous examples of the uncertainty of the state regulation of the tourism:
  - a. lack of a coherent tourism legislation;
  - b. frequent re-organisation of the institutional structure of the governmental coordination of tourism;
  - c. volatile economic environment for tourism-related service provider enterprises.
4. The county-level municipalities are not able to follow any long-term tourism-development strategy, supported by the majority of the county-assembly, because the majority of the population in these countries lives relatively far (more than 30 km) from the lake. That's why the focussing of the material sources for regional development is only a question of secondary importance, compared to another problems. In Hungarian popular press and politics the establishment of a “Balaton region” is an old problem, but – to be realistic – the re-organisation of the regional structure of Hungary seems to be problematic, and the “Balaton-region” by its size would be too small, compared by another regions (Nemes, 1997). At the same time, the organisation a Balaton-county

- could be a reasonable way, based on socio-economic similarities of different settlements and the strong local identity.
5. The involvement of monetary resources for the development seems to be key factors, around which a wide-range coalition could be organised. This necessitates a well – defined strategy. The pillars of this strategy should be the as follows:
    - a. Widening of the scope of offer of tourism; this means, that in a modern socio-economic environment the bathing and swimming in the lake fall short compared to the demands.
    - b. Increasing the lengths of the season. This is an old and neuralgic problem of the tourism development in Hungary. The realisation of the ambitions highlights the tight cooperation of each and every stakeholder around the Lake.
    - c. The Balaton, as a touristic destination should be re-positioned in mind of consumers not only as a Lake, offering the possibility of bathing, but as a complex of touristic attractions, joining to sustainable tourism.

## **ACKNOWLEDGEMENT**

The project has been supported by Hungarian National Scientific Research Fond Project under title: Regional food processing: a romantic dream or economic reality.

## **REFERENCES**

- Báger, G., Pulay, G. (2008): Costs, justification and efficiency of Balaton Region-related studies in years after the system changing. (In Hung.) Budapest, Állami Számvevőszék, Fejlesztési és Módszertani Intézet, 150. p.
- Bendahan, S., Camponovo, G., Pigneur, Y. (2004): Multi-issue actor analysis: Tools and models for assessing technology environments. In: Journal of Decision Systems, 13. 2. 223-253. p.
- Berger, P., Luckmann L. (1966): The Social Construction of Reality. New York, Doubleday, 450. p.
- Dacin, M. T., Goodstein, J. (2002): Institutional theory and institutional change: introduction to the special research forum. In: Academy of Management Journal, 45. 1. 45-47. p.
- Durance, P., Godet, M. (2008): The future territorial. (In French) Paris, Lipsor-Le Cercle des Entrepreneurs du Futur, 254. p.
- Eisenhardt, K. (1989): Agency theory: An assessment and review. In: Academy of Management Review, 14. 1. 57-74. p.
- Godet, M. (1996): Actors' moves and strategies: The mactor method: An air transport case study. In: Futures, 23. 6. 605-622. p.
- Godet, M. (2000): Toolbox for scenario planning. In: Glenn, J.C., Gordon, T.J. (Eds.) Futures research methodology-Version 3.0. Washington, UN-The Millennium Project.

- Hannan, M.T., Freeman J.H. (1984): Structural inertia and organisational change. American Sociological Review, 49. 2. 149-164. p.
- Hungarian Tourism Ltd. (2010): Tourism in Hungary. Budapest, Hungarian Tourism, 86. p.
- Járosi, K. (2006): To go into another world – tourists for adventure tourism in Hungary. In: Régio, 13. 3. 116-140. p.
- Jenei, G. (2002): Modernizing local governance in a transitional nation: evaluation the Hungarian experience. In: Public Management Review, 43. 3. 367–386. p.
- Mourato, S. (1998): Economic valuation in transition economies: an application of contingent valuation to Lake Balaton in Hungary. In: Acutt, M., Mason. P. (Eds.) Environmental valuation, economic policy, and sustainability, Oxford, Elgar, 15-34. p.
- Nemes Nagy, J. (1997): Regions and regionalism. In: Educatio, 3. 4. 407-423. p.
- Somogyi, S., Novković, N., Kajári, K. (2002): Methodology of the science (In Hung.) Keszhely, VE Georgikon Mezőgazdaságtudományi Kar, Gyakorlati, Szervezési, Vezetési Tanszék, 1–308. p.

Corresponding author:

**Zoltán LAKNER**  
H-1118 Budapest, Villányi út 35-43.  
e-mail: zoltan.lakner@uni-corvinus.hu