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## Effects of Tourism on Economic Development in Kehidakustány, Hungary

LAMPERTH, Judit  
University of Pécs, Hungary

### Abstract

*Tourism and its direct and indirect effects are not fully understood by all Hungarian economists, one reason for which is that the indices currently used are inadequate to demonstrate the specific economic effects of tourism. The precise role of tourism in the national economy is best defined by Tourism Satellite Accounts (TSA). My aim is to convince the sceptics that tourism does indeed play a significant part- even in the economy of a village on the economic periphery - and that central government should support investment in the sector, since both the direct and indirect effects of tourism in the local economy are visible even in the shorter term. I have used the example of Kehidakustány (a small Hungarian village of just over 1,100 inhabitants situated near Lake Balaton) for my study, and I have analysed the effects of tourism on the local economy. From this I can conclude that tourism can solve the problem of unemployment, as well as improve the local economy and reduce migration from the village. For the purpose of my research I have analysed secondary data from the Kehida Thermal Spa Resort and the local authority and I have also undertaken empirical research among the visitors to the spa.*

**Key words:** tourism, economic periphery, economic development, catalyst

**JEL Classification:** O13

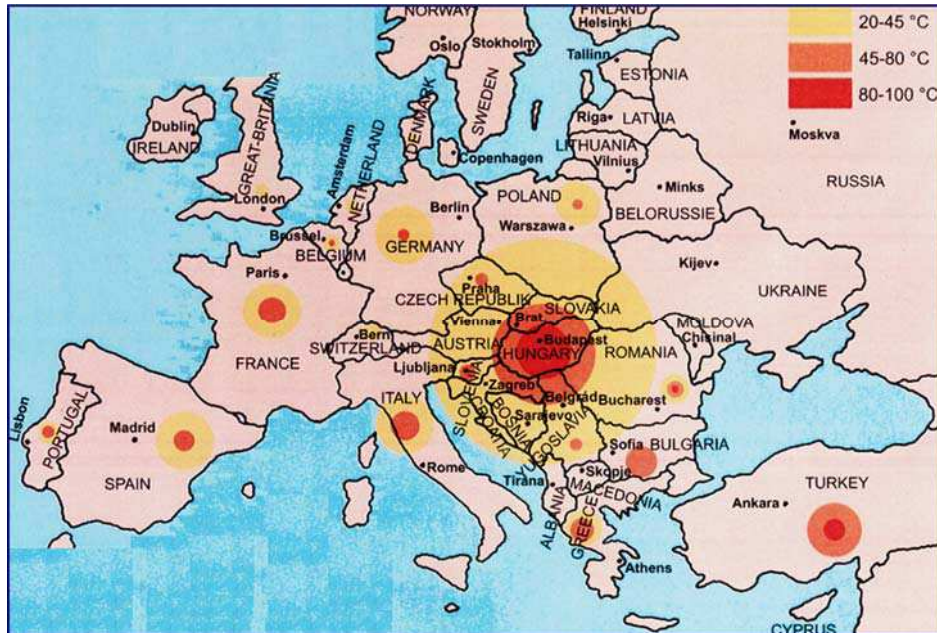
### Introduction

After the transformation of the political, economic and social system in Hungary in 1989, the situation of agriculture deteriorated dramatically. Its condition grew worse by the year and created a huge crisis over the whole of the Hungarian countryside (Buday-Sántha, 2006). This situation generated several specific problems on the periphery, such as unemployment, migration, and an ageing population. The shrinking of the active population has meant lower revenues for the local authorities and consequent serious financial problems, and this situation has continued as a self-debilitating downward spiral.

There are numerous opportunities to solve the economic and social problems of these areas on the economic periphery, but without governmental help and the appearance on the scene of public-private partnerships (PPP) the road will be a long one. However, one possibility is to develop tourism in the countryside, and not simply in Budapest and Balaton, since there are many unexploited resources throughout rural Hungary (Gubán, 2006) which can be used as main attractions.

Hungary has an extremely high potential of natural healing factors such as thermal water, mofetta, healing mud and healing climate. There is thermal water under the 80% of the surface of Hungary (see the map below from the Hungarian Tourism Development Strategy). Our country

belongs to the Top 5 thermal water empires after Japan, Island, Italy and France. This unique natural resource can be one of the bases of economic development of rural areas.



The positive economic effects of tourism (Puczko-Rátz, 2005; Lengyel, 1994) involve not only direct but also indirect impacts. The direct create employment (Michalkó, 2004) and generate income in foreign currency when tourism means an invisible export to the destination (Puczko-Rátz, 2005). The indirect involve tourism, output, sales and government revenue multipliers (Puczko-Rátz, 2005; Michalkó, 2004) and tourism acts as a catalyst to improve the local economy. Additionally, tourism has valuable spill-over effects into the micro-region.

I have used the example of Kehidakustány (a small settlement of just over 1,100 inhabitants near Lake Balaton) for my study, and I have mainly analysed the effects of tourism on the local economy. From these studies I can conclude that tourism is able to solve unemployment problems, to improve the local economy and to reduce migration from the village. For such reasons central government should support investment in tourism, since both the direct and indirect effects of tourism in a local economy are visible even in the shorter term.

At the outset of the study I set out the following hypotheses:

- 1:** As a direct effect, investment in thermal tourism will create new job opportunities in this economically peripheral settlement.
- 2:** This same direct effect will appear not only in the settlement of Kehidakustány itself, but also in its micro-region, due, I presume, to a basic spill-over effect.
- 3:** The investment in Kehidakustány will act as a catalyst and produce an increase in revenue for the local authority.
- 4:** Also as a catalyst, investment in tourism will increase the range of services in Kehidakustány.
- 5:** Investment in the spa and hotel resort of Kehidakustány will lead to further construction from further investment in the short-term.
- 6:** Tourism development and new investment in tourism will together improve the infrastructure.

- 7: Higher employment, the consequent increase in domestic income and the results of economic integration will produce a higher standard of living in the village.
- 8: If hypotheses 3 to 7 are verified, this will mean greater competitiveness not only of the village but also of the micro-region.

## Kehidakustány

Kehidakustány is a small village in Western-Transdanubia some 20 kms from Keszthely (Lake Balaton) and 12 kms from Hévíz (one of the world's best-known natural thermal spas).



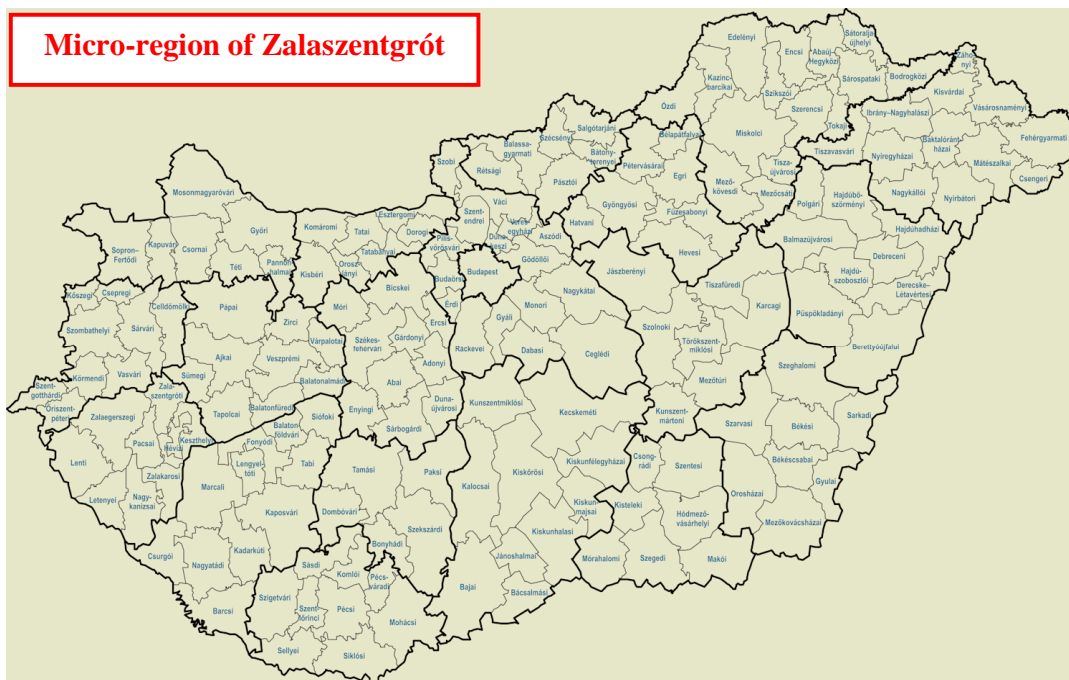
This settlement belongs to the micro-region of Zalaszentgrót, which is the economic periphery of Zala County. There are 24 settlements with 18,750 inhabitants (Hungarian Central Statistical Office, 2008) in this micro-region, giving an average population density of 781.25 inhabitants per settlement.

There are 174 statistical micro-regions in Hungary which are the sub-regions of the 19 counties (NUTS 3). These micro-regions are geographical contiguous, administrative and statistical units of Hungary (see the map on the following page).

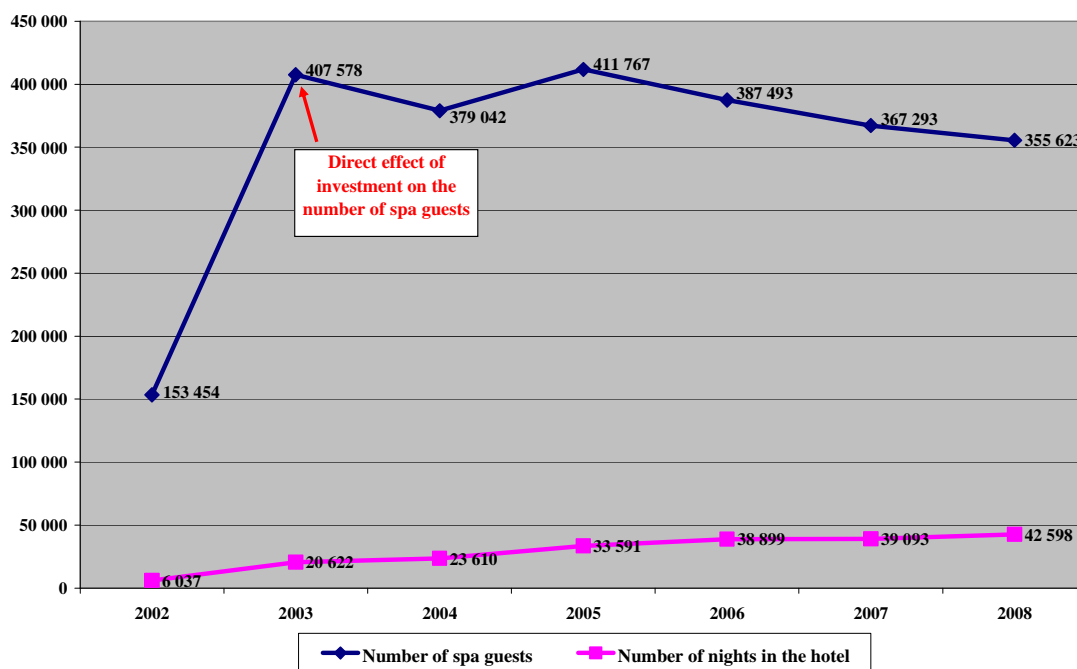
Kehidakustány was a typical agricultural village where the crisis in agriculture caused the well-known problems mentioned earlier, and the development of tourism seemed to be the only possibility to resolve this difficult situation. In the middle of the 1970's thermal water (with a temperature of 49°C) was found in the centre of the village, and at the end of the 1990's thermal tourism appeared to be the sole solution to economic under-development, unemployment and migration, and one business venture leased the thermal bath on a 50-year basis, since the local authority was unable to finance any such work in the village. This company is committed to improving thermal tourism and to cooperation in spatial development also.

Construction started in 1999 and, during the next 5 years, costs exceeded 4 billion forints (€14.8 million at current exchange rates). This means 228 beds in a four-star hotel and 1 700 m<sup>2</sup> of indoor and outdoor water surfaces. The investment also won government aid from the Ministry of the Economy and Transport and from the Health Tourism project of the Széchenyi Plan, a total of €2,925,555 (at current exchange rates). The investment means, annually, some 350-400,000 visitors to the spa and more than 42,000 bed-nights in the hotel (see *Figure 1*).

**Micro-regions of Hungary**  
(Hungarian Central Statistical Office, 2007)



**Figure 1: Number of visitors and bed-nights at Kehida Thermal (2002-2008)**



Tourism can be one solution for the crisis in the countryside, but without PPP it cannot be successful in the short-term. In this study I have confirmed the direct, indirect and spill-over effects of tourism and tourism investment on the economic periphery, and I hope that I can also convince both sceptics and decision-makers to work together with the private sector and motivate business - not only with direct financial help but also by using indirect tools.

### The direct economic effects of tourism

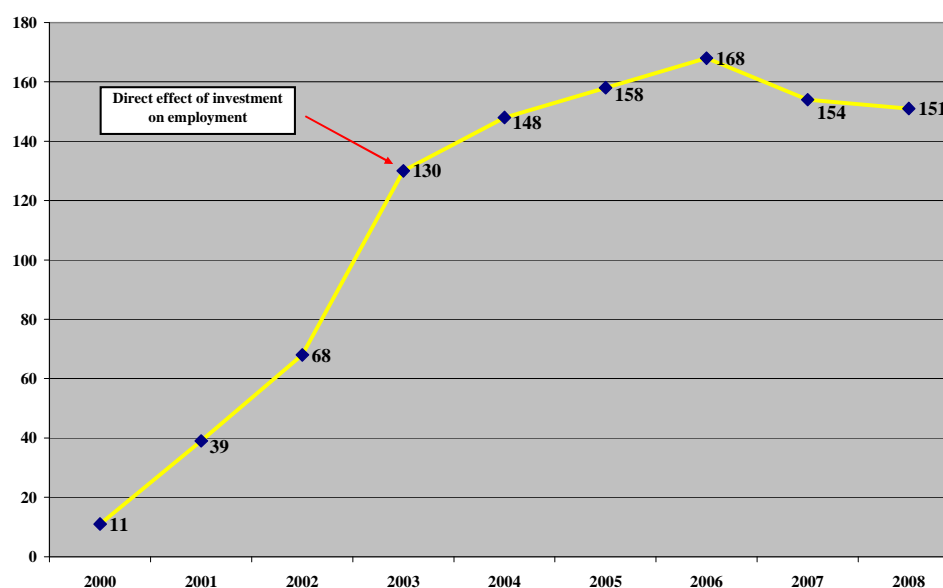
From the viewpoint of the local authority and the economy, the most important direct effect of tourism and tourism development is creating job opportunities for local residents - and this has proved to be the greatest effect of the spa construction in Kehidakustány.

*Table 1* and *Figure 2* show the significant change in number of employees before and after the investment. In 2003 the investment created 62 new jobs in the spa, which represents an increase in the number of employees of 91.2%. The number of employees reached its highest point in 2006 - a 147% increase over the base year of 2002. In the last two years a decreasing number of visitors and a significant increase in operating costs (mainly in electricity and gas) caused a decrease in the number of employees, although, in spite of this, the number of employees in 2008 was more than 122% higher than in the base year of 2002. These data clearly support my first hypothesis.

**Table 1: Average number of employees at the spa (2002-2008)**

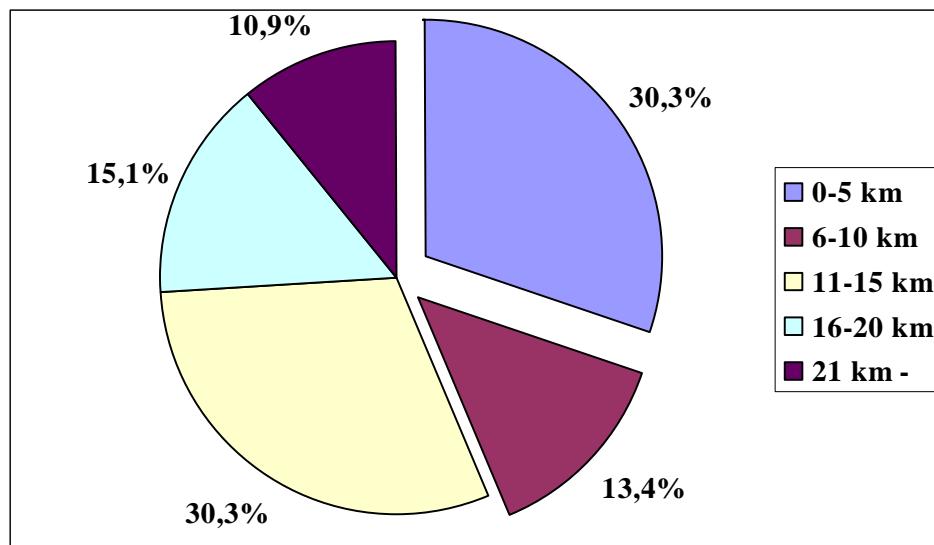
	2002	2003	2004	2005	2006	2007	2008
Average number of employees	68	130	148	158	168	154	151
Change (numbers)		62	18	10	10	-14	-3
Change (% of previous year)		191.2%	113.8%	106.8%	106.3%	91.7%	98.1%

**Figure 2: Average number of employees of the spa (2002-2008)**



I also found it important to analyse the regional range of this effect: Does this investment mean new job possibilities only for local people? Or does it also have a spill-over effect in its micro-region? As I expected, more than 43% of the employees are local people, and a further 45% come from the settlements of the micro-region – which, I contend, supports my hypothesis of the spill-over effect. Eleven percent come from a distance of at least 21 kms, but these are mostly members of top and middle-management, together with a few highly skilled personnel such as waiters and waitresses (*Figure 3*). My second hypothesis is, I believe, supported by this. (Notes: The analysis is based on the situation as at the 1<sup>st</sup> of June 2009.)

**Figure 3: Proportion of employees by permanent residence (2009)**



### The indirect economic effects of tourism

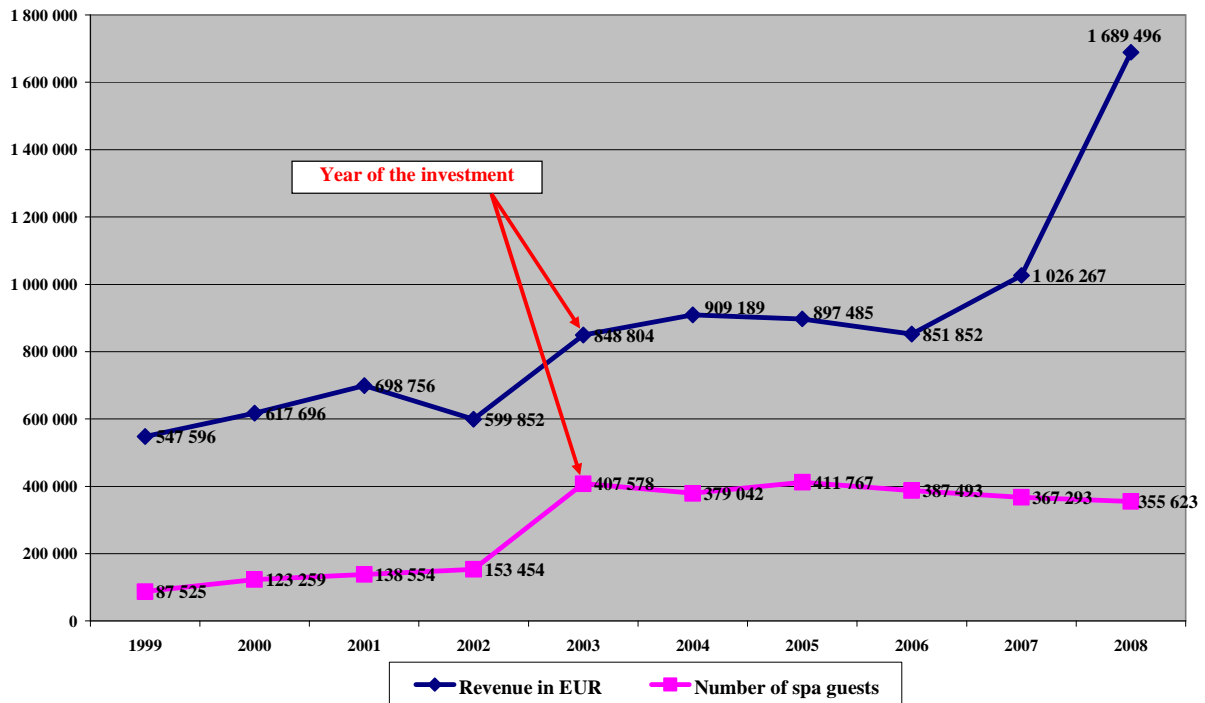
Unfortunately, several forms of tourism multiplier are not countable since there are no adequate data, and the precise economic effect of tourism is difficult to explain in a village. The role of tourism in the national economy is best defined by Tourism Satellite Accounts (Hüttl-Próbáld, 2000).

In the economic and social processes of the village and its micro-region tourism can also act as a catalyst. For analysing the catalyst effect of thermal tourism in Kehidakustány I have set out my hypotheses from 3 onwards.

### Local authority revenue

At the end of the 1990's Kehidakustány belonged to the deprived areas of Hungary, and the financial status of the local authority appeared critical. Following the private investment of €14.8m in thermal tourism, the number of spa visitors increased significantly. This brought about higher revenues for the local authority, especially from local taxes such as the Tourist, Business and Property Taxes. *Figure 4* shows the amounts of the annual revenue of the local authority in Kehidakustány and the annual number of spa visitors.



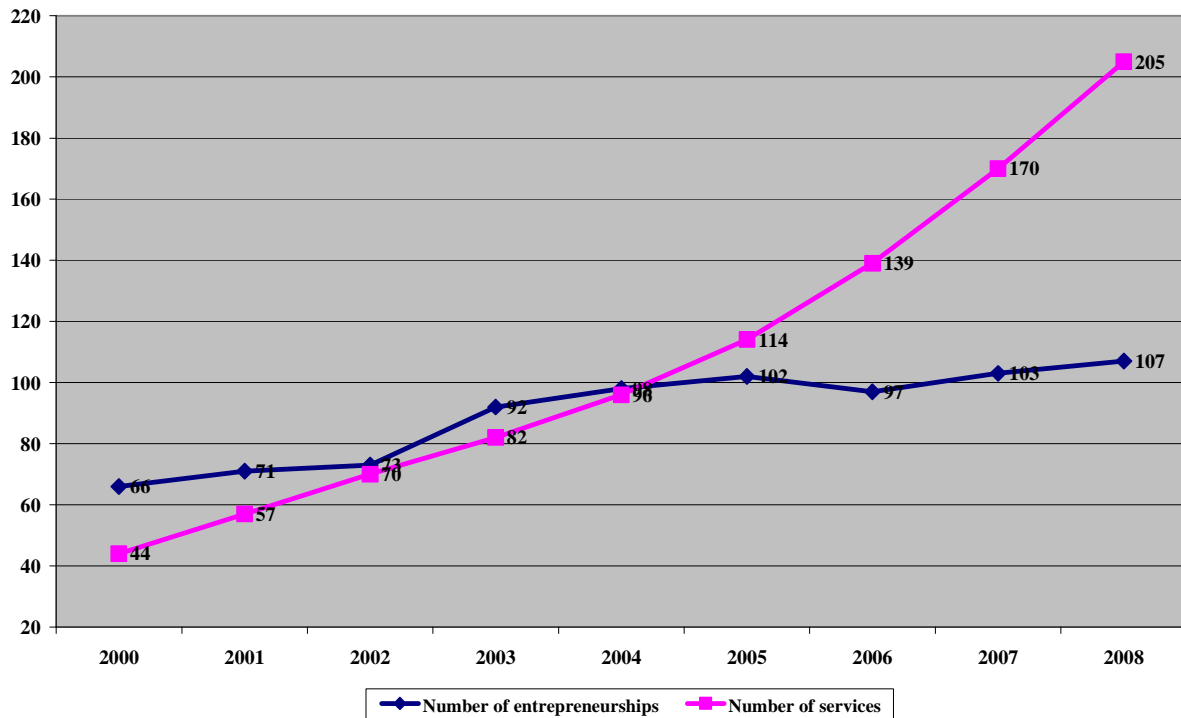
**Figure 4: Local authority revenue (1999-2008)**

A significant growth commenced after investment commenced in 2003 – to be exact, a 41.5% increase in comparison with the base year of 2002, and constant growth has produced an increase of more than 181.6% in 2008 as against 2002. This yearly revenue is the source of funds for the operation of several public institutions such as the local state school, a nursery, the local authority and investment in the local infrastructure (improvements to public services, road repairs in the village and the construction of a cycle-path). In the absence of any significant revenue in Kehidakustány from any other sector of the economy, I consider my hypothesis 3 justified.

### Range of services

Business activity changed very slowly in the years following the investment into thermal tourism. There were 73 registered businesses in the village in 2002 and 92 in 2003, a 26% growth. The number of in 2008, compared with the base year of 2002 amounts an increase of 46.6%. The main reasons for this development are positive migration to the village and the capital investment in tourism. For the most part newcomers founded new companies and small businesses.

*Figure 5* shows the number of such businesses and changes in the number of services in Kehidakustány. The number of services grew significantly following the investment. In the first year this amounted to some 17%, but 2008, when compared with the base year of 2002, showed a growth of over 192%. This involves more hotels and pensions, private accommodation, restaurants and bars, grocery stores, beauty-, wellness- and health-services, together with estate agencies.

**Figure 5: Businesses and number of services (2000-2008)**

In 2002 there were 99 private rooms available, with 210 beds, but 423 such rooms with 912 beds in 2008. That means a growth rate of more than 320% in each category. In the latter year there are 359 private rooms and 774 beds for available for every 1,000 inhabitants of Kehidakustány. Again, I would consider the catalyst effect of tourism on the number of services (as in my 4<sup>th</sup> hypothesis) as proved.

### Investments

The successful investment into the spa and hotel resort in Kehidakustány has generated further investments not only in Kehidakustány but in its micro-region. These focused mainly on increasing the capacity of accommodation such as hotels, pensions and private rooms. Some, however, are connected to other services which are tourism-related although not in a very direct way - e.g. a retail grocery, dental surgery, beautician and a builder. A golf course is under construction in Zalacsány (a neighbouring village) since, when the investors saw the success of the spa, they chose this location for their golf course. This pattern of an increasing number of private investments proves my hypothesis 5, I believe.

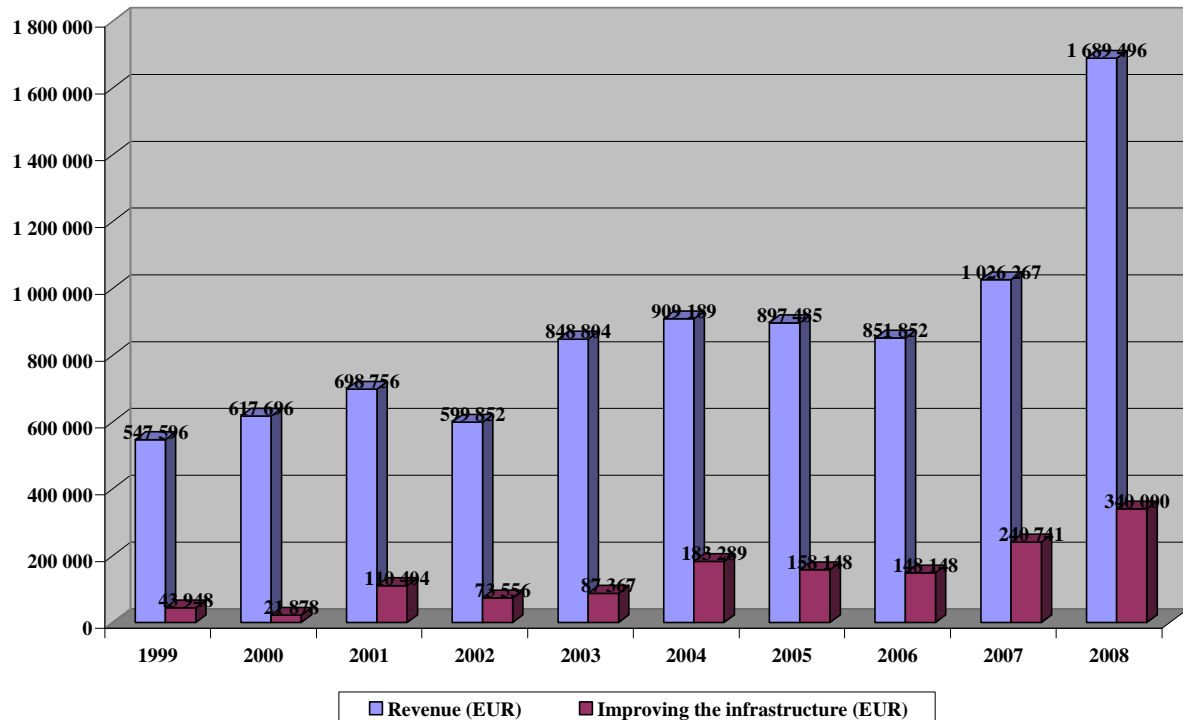
### Infrastructure

The significantly increased number of visitors and the quality of service demanded required investment into the local infrastructure. One of the most urgent tasks was to enlarge the capacity of the sewage treatment system, which was followed by laying a drinking-water pipeline to the new building sites and to others in various parts of the village. The roads were in poor condition,



needing major repairs and there also was an urgent need for cycle paths. A sports centre was built to serve local residents and to promote a healthy life-style. **Figure 6** shows the costs of building this infrastructure from the local authority's revenue. The resources used were mainly drawn from the increasing tax revenue of the local authority and grants from the Hungarian government and the European Union. I think that this fully proves my sixth hypothesis.

**Figure 6: Infrastructure building (1999-2008)**



## Empirical research

From the 1<sup>st</sup> of April 2009 I have undertaken empirical research each month among the spa visitors on the basis of a random sample. Firstly I am attempting to create a profile of a typical spa visitor (for marketing purposes) and I also ask questions about their consumption within the settlement but outside the actual spa resort since I am interested to see the value of the indirect effects on the local economy - if any.

To date, I have collected 206 Hungarian and 67 foreign completed questionnaires. 52.91% of the Hungarian tourists were guests in one of the restaurants or pizzerias outside the resort but within the settlement. 29.13% were guests in one of the cafés and 26.7% were buying something in one the groceries. There seems to be quite intensive consumption outside the hotel and spa resort but the period was mainly the spring and summer seasons. I think that the late autumn and winter will mean lower consumption simply due to less favourable weather. Only 18.45% of the sample has used accommodation in the village – which I find rather low. This means that most of the respondents were merely day visitors and not tourists within the accepted definition. It is clearly important to convince spa guests to stay longer, but to achieve that it may be that product improvement is necessary.

### **The economic effects on the micro-region of Zalaszentgrót**

There are 24 settlements in the micro-region of Zalaszentgrót – with a total of 18, 750 residents. I prepared a questionnaire relating to six issues only and designed to learn the feelings or impressions of the mayors of these other villages about the thermal tourism investment in Kehidakustány and its effects on the economy. There was an eleven-point scale from -5 to +5.

0 means no effect

Negative numbers mean negative effects: -5 the strongest; -1 the weakest

Positive numbers mean positive effects: +5 the strongest; +1 the weakest

The issues raised were:

1. What influence on tourism in my village
2. What profit for businesses in my settlement (vertical integration)
3. Any consumption in the hotels, pensions, private rooms and restaurants in my village (horizontal integration)
4. Any solution for unemployment in my village
5. What overall effect on the economy of my village
6. What effect on the revenue of the local authority of my village

I received back only 5 questionnaires from the 24 mayors of the micro-region and so the result of this research attempt is not appropriate for analysing the exact effects of the Kehidakustány project. Further (personally conducted) research is required to obtain the opinions of the mayors concerned.

There were no negative answers - only positive or neutral. This emphasizes again the direct and indirect positive effects of tourism development in rural areas.

Questions 2, 5, 6 received the weakest positive values with the average of +1. The mayors felt that the tourism investment in Kehidakustány had generated little impact on the vertical integration of other businesses, and played no significant part in the economy of the village and the revenue of the local authority.

Question 3 received a slightly more favourable result with a value of 1.25 - meaning more customers and consumption in the horizontal integration (hotels, pensions, private rooms, restaurants).

Questions 1 and 4 achieved the highest average with 1.5. The investment in Kehidakustány has generated tourism in other settlements and also offers a solution for unemployment.

### **Conclusion**

I have examined a successful investment in thermal tourism from the economic periphery of Hungary and attempted to evaluate its direct and indirect effects. Such investments can solve the greatest problem of the Hungarian rural areas such as unemployment and a lack of economic growth, and they can also act as a catalyst in the economic and social processes. It is, however, not a general recipe for improving the economy of rural areas, and I would emphasize that tourism can be (rather than must be) the solution since its success depends on a complex foundation – for example, on the basic attraction, the quality of service, the investment capital available from investors and on a functioning public-private-partnership etc.

Hypothesis 7 about the socio-cultural effects of tourism and impacts of tourism development on the standard of living of local residents and Hypothesis 8 on the effects of tourism investment on regional competitiveness require deeper research and analysis. This will be a major part of my future work and of my doctoral dissertation.

### **Acknowledgements**

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