



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

SUSTAINABLE COUNTRYSIDE AND COMPETITIVENESS

Prof. SZLÁVIK, JÁNOS – CSETE, MÁRIA

SUMMARY

Sustainability – which is a way of thinking, life, production and consumption – covers all dimensions of human existence, its relation to natural resources, the economy and society. Sustainability can be the solution – beside research and development processes – to global problems like globalising economy and market competition, global warming, poverty and famine. United Nations' actions from Rio to Johannesburg and EU decisions seem to underpin this. Well-intentioned efforts up to the present have been made on global level with few results. Therefore it is necessary to implement sustainability on regional and local – sub-regional, company – level. Sustainability is getting into the centre of expectations and actions. It is very likely that only regions and sub-regions recognising the importance of sustainability in time, will be successful and competitive as a result of this advantage. Settlements neglecting sustainability will not be able to keep their inhabitants, the countryside around them will not be able to produce enough products meeting food safety standards, and will exhaust its natural resources fairly quickly. The competitiveness of a region is largely determined by the state and development pattern of its rural areas and settlements. Therefore research has been focused on sustainable countryside and its important elements, sustainable (liveable) settlements. During our investigations we implemented a new indicator and index number set that reflects all dimensions of sustainability, the present situation, and supports the bottom-up decision-making process of local governments and NGOs in order to promote development. These investigations highlighted the facts that potential competitiveness of a region can only be based on sustainable settlements, sub-regions and it is essential to eliminate deficiencies that restrain present and future development.

INTRODUCTION

In recent decades both the terms competitiveness and sustainability have become quite popular. We can find several interpretations of the two terms in the literature. They play key roles also in the two main strategies of the European Union. These circumstances motivated our paper, dealing with the investigation of the relationship between competitiveness and sustainability, and trying to sys-

tematise the practical steps in Hungarian circumstances and the measurability of implementation on the local level of sustainability. We assume that it is the easier to make progress on local level, because it is very likely that in a region, sub-region or settlement local people are well aware of the urgent need to accomplish sustainability in their everyday, practical life and hereby improve competitiveness and set a solid base for the future.

Since the publication of Our Common Future by the Brundtland Commission in 1997, the principle of sustainable development has been widely accepted. The Amsterdam Treaty of EU declares the following principle: it is the aim of the Union to foster economic and social development not only with regard to environmental protection but also considering the principle of sustainable development (8,12). Despite of declared principles and goals included in the treaty, sustainability is very rarely implemented in practice on national and regional level in the Union. According to EU evaluation, there is some progress on local level. With EU accession on the 1st of May 2004, it has become a Community requirement to implement sustainable development also in Hungary, where the countryside is especially rich in natural values of European importance (Nature 2000 network, protected areas, national parks, high quality soil). Therefore local and sub-regional sustainability programs are extremely important. It is often a dilemma, how to reconcile sustainability and competitiveness in local development programs. Furthermore, the Lisbon Strategy plays a significant role in the processes of the European Union. These processes motivated this study dealing with the relationship between competitiveness and sustainability.

This investigation can be considered as a step toward practical realisation of sustainable development emphasising the importance of local (sub-regional, settlement) level and its role in the competitiveness of the whole region and country. In our investigations we focused on factors other than just economic activity, which is not the only factor influencing competitiveness.

SUSTAINABILITY AND COMPETITIVENESS IN THE EUROPEAN UNION

The Council of Europe set a new goal for the EU in Lisbon in 2000: to become

"the most competitive and dynamic knowledge-based economy in the world, capable of sustainable growth with more and better jobs and greater social cohesion" (7).

The Strategy of Sustainable Development was accepted in June, 2001 in Göteborg and concrete environmental aspects have been incorporated into the Lisbon process dealing with employment, economic reform and social cohesion.

Annual Conference of the European Economic and Social Committee and the Presidents and Secretary-generals of the National Economic and Social Committees in 2004 was held in Luxemburg (1). They reaffirmed the importance of handling economic, social and environmental problems in a common, harmonic and equal way. It is very important to keep in mind that the Lisbon Strategy is a comprehensive plan requiring inter-sector cooperation to harmonise various policy fields, action plans and expected outcomes Our model introduced here is meant to satisfy these criteria.

The concept of sustainable development offers a long-term vision for the EU highlighting the necessity of a comprehensive resolution of environmental, economic and social problems. This has been confirmed by the findings of the half-term review of the Lisbon strategy. It has also become popular to emphasize that all stakeholders at all levels (global, regional and local) have to participate actively. We would like to analyse local implementation of competitiveness and sustainability in view of the EU strategies.

THE INTERPRETATION OF SUSTAINABILITY AND COMPETITIVENESS AT THE LEVEL OF HUNGARIAN REGIONS

Regional approach is a step toward local implementation. Regional economic development has always been important in the economic policy of the EU. Its ba-

sic goal is to enable the cooperation between regions and diminish regional differences. This approach is likely to become even more dominant. In our case we investigate national regions only and ignore cross-border regions. We assume however that sustainability is similarly important for these regions too. According to the spatial statistical system (NUTS) introduced by the Eurostat as early as in 1998, there are seven NUTS II level statistical regions in Hungary. There are established regional development committees and offices for these regions, as representatives of the necessary new approach, while the traditional, county-based system still exists in parallel. Regional institutions do not play an important role at present, because they cannot function the way they are supposed to. The situation is the result of new regional tasks and the way they have been established. The regions have been established by joining areas of very different environmental and economic characteristics and levels of development. For example, the Central Region of Hungary consists of the following areas with very diverse functions, problems and opportunities: the capital, its agglomeration and an agricultural area, the so-called "golden triangle", Cegléd-Nagykőrös-Abony. It is especially critical to integrate the capital into the region, even though she influences not just Pest County but several other counties. Another critical problem is for example that the lake Balaton and surrounding areas is not a coherent region. Taking all these problems into consideration, it is hardly surprising that the rationalisation of this system, the clarification and modernisation of functions of different territorial components is almost continuously on the agenda.

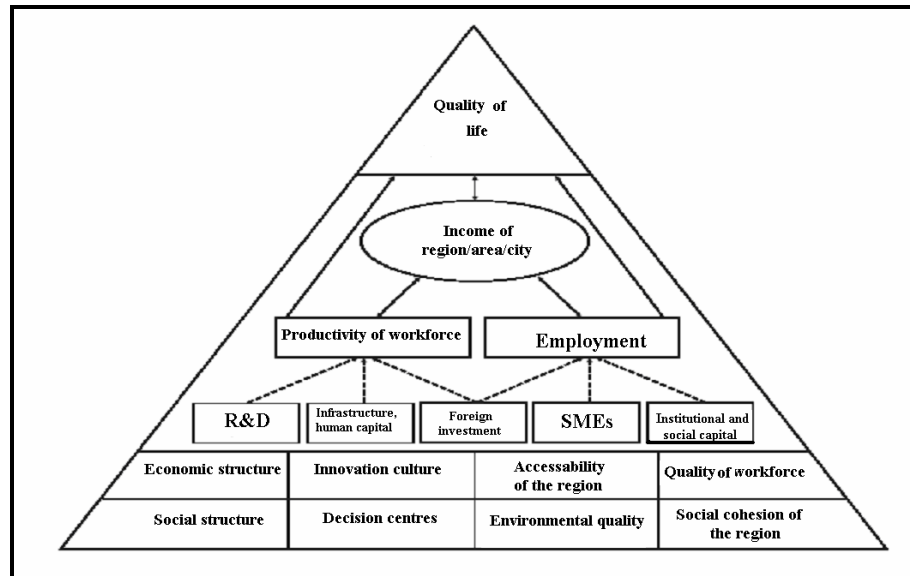
It is not easy to investigate competitiveness either at micro- or at macro-level, because there are several different

interpretations of the term. The definitions of the EU and OECD mention sustainable employment level and sustainable income in the context of competitiveness and sustainability. According to the sixth Regional Report of the EU the standardised definition of competitiveness is the ability of companies, sectors, regions and cross-border regions to sustain relatively high income (and/or high economic growth) and employment level while exposed to global competition. In our opinion this definition is not complete because it lacks the three dimensions of sustainability as basic criteria. Sustainability is an aim, a basic condition of long-term competitiveness and a barrier at the same time.

The pyramid model (*Lengyel I., 2000*), representing the competitiveness of regions, areas and cities is based on the above-described definition: the main goal on the top of the pyramid represents the improvement of living standard and welfare of citizens. On the level below are the basic categories of competitiveness (income, productivity of workforce, employment) based on fundamental factors of direct influence (e.g. R+D, infrastructure, foreign investment, SMEs, institutional and social capital). Finally, at the base of pyramid we find the so-called accomplishment factors, which describe the social and economic conditions in the background of the region. Of the eight accomplishment factors one is the quality of the environment, which is one of the three dimensions or pillars of sustainability. The balance of accomplishment assessment is shifted too much in favour of social and economic factors. In our opinion the accomplishment of sustainability is based on the harmony of the three dimensions, economy, society and environment, in equal consideration. This is also essential in guaranteeing the long-term competitiveness of regions, areas and cities.

Figure 1

Competitiveness of regions, areas and cities



Source: Lengyel I., 2000

With reference to the dimensions of sustainability, economic factors are usually represented by comprehensive indices, while environmental characteristics are mostly represented by several different indicators. This makes their evaluation difficult. The situation is similar in the case of social factors, which are qualitative characteristics of the population, but detailed and statistically good quality social indicators are usually plentiful. The quality of data and methods of calculation used influence the feasibility of regional investigations, which are essential in measuring competitiveness. Collection of data samples is becoming increasingly popular nowadays (9). To decrease bias, it is useful to consider settlements as units. The following indicator system based on this approach satisfies modern sustainability requirements and can be used as a tool to find development opportunities and breakout

points by mapping competitiveness and supporting long-term sustainability under favourable conditions.

SUSTAINABLE COUNTRYSIDE AND COMPETITIVENESS

It is very likely that regionalism will come to the forefront as a result of national and EU efforts to alleviate regional differences. Whatever solution will be chosen, the location of rural areas will have to be taken into consideration, as their development level and potential highly influences regional development and potential competitiveness of regions. Worsening living conditions in rural areas might threaten the economic development of some regions or the whole country or even national identity. Welfare and enduring public safety is essential to guarantee an attractive way of life in the countryside in harmony with European Union at-

tempts to retain the population at their rural residence. If rural areas are unable to perform all their functions (economic, productive, ecological, social and cultural) satisfactorily, this can undermine the socio-economic base of the region or of the whole country.

To sustain innovation and development in a culturally degraded landscape, a desolated or overgrown area is possible only if the atmosphere is still free of pollution and food and drinking water is imported from other regions (see Silicon Valley). However, environmental degra-

dation will eventually make human habitation impossible.

Natural environment affects the development of a whole region, but as an interaction developed regions might support rural areas. There is no developed, competitive region without sustainable rural areas; therefore developed areas should in return contribute in creating and maintaining vital rural areas.

When comparing EU and Hungarian data since the 1990s, there are some substantial differences (Table 1).

Table 1

Comparison of EU and Hungarian territory data

	EU-15	Hungary
Territory (1000 km ²)	3231	93
Population (1000)	372 000	10 135
Population density (person / km ²)	115,1	108,9
Urban areas (%)	15,6	3,9
Countryside areas (%)	37,4	34,6
Rural areas (%)	47,0	61,5

Source: Csete L. – Láng I., 2004

We can see from Table 1 that there are big differences in the level of urbanisation between Hungary and the EU, even though several settlements have received the title of town every year in the past decades. The ratio of urban areas in the EU is four times as much as in Hungary. Actually, the number of middle-sized towns is very low in this country. The countryside and rural areas constitute exactly 96% of the whole territory of Hungary. Differences in population density do not seem to be high according to Table 1; there are however large variations within the country. One third of the population lives in Budapest and surrounding settlements where the population density is quite high, while the density is very low in some other regions of the country.

The City Construction and Planning Institution has prepared a study for the Ministry of Agriculture and Rural Development that showed that 90 (60%) out of 150 statistical sub-regions may be considered as socio-economically underdeveloped. The Institution suggested implementing a rural development program in 67 sub-regions. These data indicate that rural development is especially important in Hungary and concentrations of underdeveloped areas within a region place a potential barrier for the development of the whole region.

SUSTAINABLE COUNTRYSIDE AND SETTLEMENT

Thus the role of rural area and settlement development in improving re-

gional and national competitiveness is particularly important in Hungary, because of the high proportion of rural areas compared with the EU. Hopefully rural areas satisfying sustainability criteria not only influence the region positively as a whole but also generate income by producing products for consumers within and outside of the region and can contribute to regional competitiveness in this way. It can be simply stated that a product is competitive if it can be sold, an enterprise is competitive if it can survive on the open market or even improve its trading position and a settlement is competitive if it is habitable.

Of course, the meaning of competitiveness changes all the time but presumably activities and areas producing high-quality goods with higher effectiveness and using less resources will remain competitive on the long run. Sustainable rural development could achieve this end.

Sustainability is a new way of thinking, of life and of economic activity, a basically new dimension to the people-nature relationship. The role of sustainable countryside and settlement is even clearer if we consider the situation of Hungarian countryside. We can conclude the simple but important fact that a rural area or settlement is sustainable if it is habitable. The determining characteristics of a habitable settlement are as follows (*Csete L. – Láng I., 3*):

- Living conditions are preferable, people like to live in the settlement
- The settlement is financially sustainable, that is there are no liquidity problems and it has the necessary resources to achieve strategic objectives
- The income level is high enough to eliminate differences between urban and rural income
- Agricultural production and land use is sustainable

- The level of knowledge and education is improving

- Health, cultural and information needs of local people can be met

Our investigations so far have been based on two approaches: the above described sustainable countryside concept and the Bellagio principles (11).

Hungarian Central Statistical Office has applied a complex index number consisted of 19 indicators to measure the development level of settlements since 1999. It would be necessary to modify this system to include also sustainability aspects. The criteria system, our indicators and index numbers satisfying the above-mentioned criteria has to fit also the following conditions:

- It has to reflect local sustainability criteria
- It has to be useful for development planning of the settlements
- Indicators have to be available or deducible from available databases
- Indicators have to be comparable with indicators of other research

Considering these criteria we managed to create an index number and indicator system that proved capable of measuring sustainability and its changes, preferable improvements and enabled the comparison of settlements. The subject of our investigation is a special area, including six settlements by Lake Tisza: Poroszló, Újlőrincfalva, Sarud, Tiszánána, Kisköre and Pély. These settlements are seriously disadvantaged but are situated in a valuable holiday area. Another special condition is that parts of this region belong to two statistical regions, four counties and five sub-regions.

The following elements have been investigated and analysed at settlements level according to indicators of the three dimensions of sustainability.

1. Natural resources, state of natural environment and landscape.
2. Social development of the settlement, living conditions, social status, culture, traditions.
3. Economic and infra-structural development, organisational and institutional background.

Main elements of the three groups are listed in Table 2. The hypothetic in-

formation and indicator system measuring sustainability proved appropriate. The sources of information were diverse ranging from statistical database, expert consultations, on-site visits to interviews. We gained on average 98 index numbers or indicators for all settlements. We could draw some general conclusions by comparing and analysing settlement data.

Table 2

Simplified structure of sustainability indicator system

<p>I. State of the environment, natural resources and landscape</p> <ol style="list-style-type: none"> 1. Natural values, sights, parks, arboretums, values of built environment, etc. 2. Characteristics of biodiversity 3. Natural resources utilised to satisfy human needs 4. Hydrography, drinking water supply 5. Characteristics of agricultural areas 6. Characteristics of weather 7. General characterisation of environment <p>II. Living conditions, culture, traditions</p> <ol style="list-style-type: none"> 1. Characteristics of the population 2. Characteristics of families 3. State of Roma population 4. Conditions of living on the settlement 5. Culture, traditions <p>III. State of infrastructure and economy on the settlement</p> <ol style="list-style-type: none"> 1. Financial sustainability of local government 2. State of enterprises 3. Level of self-sufficiency of the settlement 4. Infra-structure
--

Source: Szilávik J. – Csete M., 2004

The systematised data and information was additional, new information for local governments proved useful for future decision-making. Without any support from the society, the resolution of contradictions (these settlements are seriously disadvantaged but situated in an

valuable holiday area) would be a very long process. In addition to support from the society there is also a need for *own initiatives*, *self-organisation* and *self-support* within the settlements. The “Settlements mirrors” investigated serve as an aid for these initiatives.

The realistic base of sustainable countryside and settlements could be the sustainable management of natural resources, the improvement of habitability, tourism especially health tourism and sustainable agricultural production.

However, for the sake of development it is essential to *eliminate deficiencies*, namely the lack of cooperation, the lack

of potential for successful tendering, the lack of successful handling of the Roma issue and the lack of an integrated program for sustainable management of natural resources. *Solving or softening these problems would mean a progress toward competitiveness and would contribute to the rise of the region in harmony with the modern concept of sustainability.*

REFERENCES

- (1) Annual Conference of the European Economic and Social Committee and the Presidents and Secretaries-general of the National Economic and Social Committees, Luxemburg, 2004 – (2) Botos J. (2000): Versenyképesség elemzés: fogalmi körüljárás, hazai esélyek. In: Farkas B. – Lengyel I. (szerk.): Versenyképesség – regionális versenyképesség. SZTE Gazdaságtudományi Kar Közleményei, JATEPress, Szeged, 218-234. pp. – (3) Csete L. – Láng I. (2004): A fenntartható agrárgazdaság és vidékfejlesztés. MTA Társadalomkutató Központ, Budapest – (4) Faluvégi A. (2000): Az elmoradott, illetve az országos átlagot meghaladó munkanélküliséggel sújtott települések listájának felülvizsgálata. Területi Statisztika, KSH, Budapest – (5) Hungary: Basic features and indicators of social, environmental and economic changes and planning for sustainability, Hungarian Commission on Sustainable Development National information to the World Summit on Sustainable Development, Johannesburg, 2002. – (6) Lengyel I. (2000): A regionális versenyképességről. Közgazdasági Szemle, XLVII. évf., dec., 962-987. pp. – (7) Nemzetközi együttműködés a fenntartható fejlődés jegyében és az Európai Unió Fenntartható Fejlődési Stratégiája. Fenntartható Fejlődés Bizottság, Budapest, 2002. – (8) Our Common Future. Oxford New York Oxford University Press, 1987 – (9) Pukli P. (2000): A gazdaságstatisztika regionális mutatószámai. In: Farkas B. – Lengyel I. (szerk.): Versenyképesség – regionális versenyképesség. SZTE Gazdaságtudományi Kar Közleményei, JATEPress, Szeged, 235-244. pp. – (10) Szlávik J. – Csete M. (2004): A fenntarthatóság érvényre juttatása és mérhetősége települési – kistérségi szinten. Gazdálkodás, XLVIII. évf. 4. szám – (11) Szlávik J. (2005): Fenntartható környezet- és erőforrás-gazdálkodás. KJK-Kerszöv, Budapest – (12) Treaty of Amsterdam Official Publications of the European Communities, Luxemburg, 1997. In: Az Európai Unió környezetvédelmi szabályozása. Bándi Gyula, KJK-Kerszöv, 2001

ADDRESS:

Dr. Szlávik János

egyetemi tanár, tanszékvezető
 Budapesti Műszaki és Gazdaságtudományi Egyetem
 Gazdaság- és Társadalomtudományi Kar
 Környezetgazdaságtan Tanszék
 1111 Budapest, Sztoczek u. 2. IV. em.
 Tel: 463-1941, Fax: 463-1149
 E-mail: szlavikj@eik.bme.hu

Csete Mária

PhD hallgató

Budapesti Műszaki és Gazdaságtudományi Egyetem

Gazdaság- és Társadalomtudományi Kar

Környezetgazdaságtan Tanszék

1111 Budapest, Sztoczek u. 2. IV. em.

Tel: 463-1941, Fax: 463-1149

E-mail: csete@eik.bme.hu