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NEW ELEMENTS AND RESEARCHES IN SPATIAL ECONOMY

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NEW ELEMENTS AND RESEARCHES IN SPATIAL ECONOMY

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PREFACE

One of the most important and exciting issues of today's spatial economy is what possibilities and directions must be taken into account while determining the development paths. Researchers are facing new challenges due to the globalization process of the international economy, the changes due to today's economic crisis, the migration of the labor force, the spreading of the new economic sectors and the increasing demand of energy. How can we take advantage of the research findings and achievements of the economic space? What could be the directions, ways and tools of the long-term strategies?

Researches on these issues have existed since the middle of the 19th century both in Europe and in the world. However their contents and frames have been changing in line with the circumstances of the different ages. Considering the real processes, it seems that we are facing radical changes overall the economy. The increase in the energy demand, the difficulties of the food supply, the decrease in the drinking-water base and the possibility of an environmental catastrophe due to the global warming up have generated the definition of new and new research trends. It seems that we will have less time to answer these questions and solve these problems than we are expecting at the moment. Therefore, there is a question raised: Where is our place in the changing spatial economy? If we look at the economic policy trends of nowadays, it is obvious that Central-Europe can be defined on rather historical or emotional basis, while the spatial integration of realistic economic, social and political conditions is mostly missing and we lack the basis for cooperation too. In the present global economic crisis, arguments for European cooperation are mainly political, but it is obvious that the common economic solutions should come into the frontline also in short terms (because of the power of such cooperation).

Information and Knowledge are both keys to solve the economic difficulties!

Consequently, we believe that it is necessary to carry out such research projects which incorporate the most important elements and coherences of the spatial economy. The findings of those researches may result more transparent economic processes and development possibilities. One of the aims of this book is to publish the actual results and findings of highly acknowledged researchers and lecturers of this field in order to help the work of the strategy-definers of spatial economy.

Let me offer this book to the **professor emeritus colleagues (László Szénay, László Lőkös, Pál Romány, László Németi, Ferenc Bíró, György Enyedi, Lajos Szabó)** of the Institute of Regional Economics and Rural Development of the Faculty of Economics and Social Sciences at the Szent István University as expression of our respect. Their help in the past has established the guidelines for future developments and has set us on feet in the magical world of examining the spatial economy.

February 2009

Dr. József Káposzta CSc
editor

ELIGIBLE REGIONS OF STRUCTURAL AND COHESION FUNDS IN THE EU IN 2000-2006 AND 2007-2013 PROGRAMMING PERIODS

JÓZSEF KÁPOSZTA–HENRIETTA NAGY

Introduction

In our study we have intended to examine how the structural and cohesion funds have been allocated among the member states for the current financial period and what measures have been planned by each member state to develop their economies with the help of those sources. The European cohesion policy is 20 years old now, since the first cohesion reform was introduced in 1988. Therefore, it has been two decades since the Union has been trying to focus on the less-developed regions and to allocate financial sources for cohesion purposes. The Commission regularly prepares reports about the progress on cohesion within the Union, examining the results and achievements of the past cohesion measures. Five cohesion reports have been made so far, the fifth was published in 2008. From the official documents of the European Union the maps of eligible regions of both the 2000-2006 and 2007-2013 periods have been collected to show how the group of regions to be supported has been changing over the years. In addition, we have also tried to find out what the expected results will be of the cohesion policy.

Material and method

According to the new system of structural and cohesion funds, the European Union allocates the financial sources through 3 Objectives between 2007 and 2013. In the current financial period, there are 3 objectives, namely:

- Convergence Objective,
- Regional Competitiveness and Employment Objective and
- European Territorial Cooperation Objective.

Table 1 shows the difference between the former and the current system of Objectives.

Table 1. Objectives of the Structural Funds between 2000-2006 and 2007-2013

Objectives	2000-2006	2007-2013	Objectives
1.	Regions with GDP per capita less than 75% of EU average	Regions with GDP per capita less than 75% of EU average	**Convergence**
2.	Territories undergoing economic transition	Remaining regions	**Regional Competitiveness and Employment**
3.	Modernization of education/training systems and employment	Cross-border co-operations	**European Territorial Co-operation**

Source: HARVEY, 2006

Table 2. Cohesion policy 2007-2013: indicative financial allocations by member states (million EUR, current prices)

	Convergence Objective			Regional Competitiveness and Employment Objective		European Territorial Cooperati-on Objective	TOTAL
	Cohesion Fund	Convergence	Statistical phasing-out	Phasing-in	Regional Competi-tive-ness and Employment		
Belgium			638		1 425	194	***2 257***
Bulgaria	2 283	4 391				179	***6 853***
Czech Republic	8 819	17 064			419	389	***26 691***
Denmark					510	103	***613***
Germany		11 864	4 215		9 409	851	***26 339***
Estonia	1 152	2 252				52	***3 456***
Greece	3 697	9 420	6 458	635		210	***20 420***
Spain	3 543	21 054	1 583	4 955	3 522	559	***35 216***
France		3 191			10 257	872	***14 320***
Ireland				458	293	151	***902***
Italy		21 211	430	972	5 353	846	***28 812***
Cyprus	213			399		28	***640***
Latvia	1 540	2 991				90	***4 621***
Lithuania	2 305	4 470				109	***6 884***
Luxemburg					50	15	***65***
Hungary	8 642	14 248		2 031		386	***25 307***
Malta	284	556				15	***855***
Netherlands					1 660	247	***1 907***
Austria			177		1 027	257	***1 461***
Poland	22 176	44 377				731	***67 284***
Portugal	3 060	17 133	280	448	490	99	***21 510***
Slovenia	1 412	2 689				104	***4 205***
Slovakia	3 899	7 013			449	227	***11 588***
Finland				545	1 051	120	***1 716***
Sweden					1 626	265	***1 891***
United Kingdom		2 738	174	965	6 014	722	***10 613***
Romania	6 552	12 661				455	***19 668***
Interregional						*445*	*445*
Technical assistance							*868*
TOTAL	***69 577***	***199 323***	***13 955***	***11 408***	***43 555***	***8 721***	***347 407***

Source: European Commission, 2006

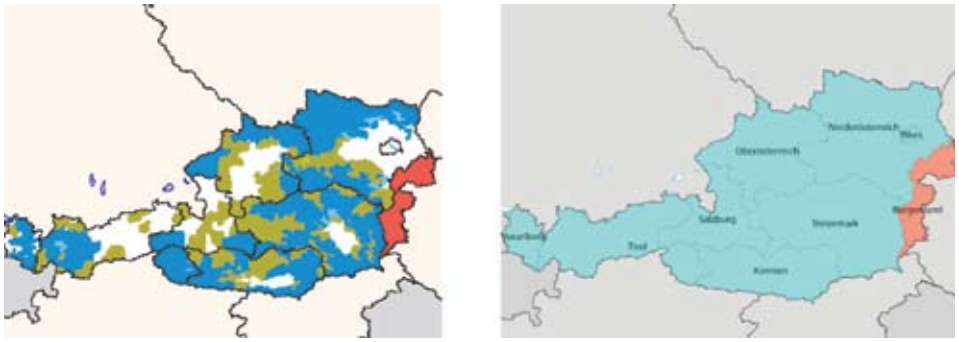
In the former programming period, there were **four Structural Funds** financing the developments, namely European Regional Development Fund, European Agricultural Guidance and Guarantee Fund, European Social Fund and Financial Instrument for Fishing Guidance, while in the current period there are **three Structural Funds**: European Regional Development Fund, European Social Fund and a new fund, namely Cohesion Fund. Each of these funds may finance more than one objective. However, there are additional possibilities for transitional support for the phasing-out and phasing-in regions. Table 2 shows the breakdown of the different sources allocated for the 2007-2013 period by member states. We can see that the **highest amount** has been allocated to **Poland**. This country may receive almost **20% of the total amount of cohesion funds**. It is a very interesting fact that the **second highest allocation**, which is far less (€ 35,216 million) than that of Poland, has been dedicated to one of the "older" member states, literally, to **Spain**. The reason for that may be that Spain has been one of the cohesion countries that have received great amount of funds since their accession. The next country in this order is also an "old" member state, **Italy**. These two countries may receive higher amount of support than even the "new" member states, which countries are far less-developed than the Western-European countries. For the Hungarian developments more than 25 billion euro is available between the 2007-2013 programming period. That amount is the second largest among the member states joined in 2004 and 2007. Only the Czech Republic may receive a bit more support than our country. In the followings you can get detailed information about each member state, the breakdown of available sources and also the maps of eligible regions for both the 2000-2006 and 2007-2013 programming periods, therefore it is easy to see how the regions of the member states could achieve improvements and how much they could develop in the last few years. **On the figures on the left** the eligible regions for **Objective 1 (red) and 2 (blue)** can be seen in the **2000-2006 programming period**, while **on the figures on the right Convergence Regions are marked with red colour and Competitiveness and Employment Regions are marked with blue for the 2007-2013 period**. There are other colours on the figures on the left which refer to different **phasing in- and out funds**.

Austria

For the 2007-2013 period, Austria has been allocated **€ 1,461 million** in total: **€ 177 million** under the **Convergence Objective, € 1,027 million** under the **Regional Competitiveness and Employment Objective** and **€ 257 million** under the **European Territorial Cooperation (ETC) Objective** (COHESION POLICY 2007-2013 NSRFs, 2008).

The Bundesland of Burgenland is eligible under the Convergence Objective (phasing out). All eight remaining Länder are eligible under the Regional Competitiveness and Employment Objective. There is no change compared to the period 2000-2006, during which these regions were supported under "Objective 1" and "Objective 2", respectively.

Figure 1 and 2. Eligible regions of Austria for 2000-2006 and 2007-2013

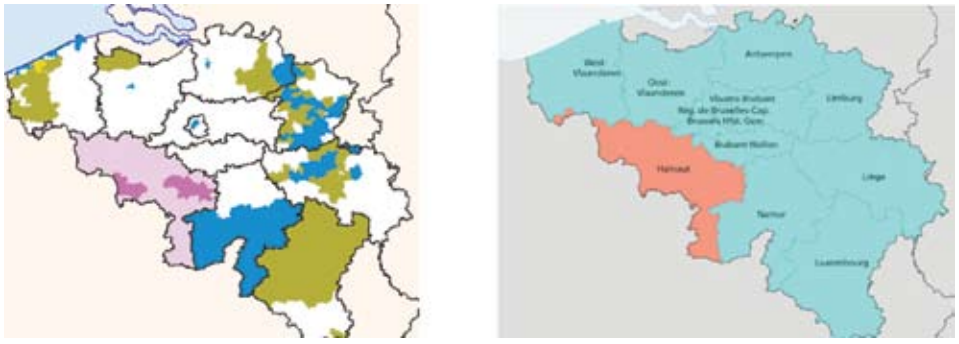


Source: http://ec.europa.eu/regional_policy/atlas/austria/maps/pdf/map_at_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/austria/index_en.htm

Belgium

For the 2007-2013 period, Belgium has been allocated **€ 2,257 million in total: € 638 million** for the statistical phasing-out regions under the **Convergence Objective, € 1,425 million** under the **Regional Competitiveness and Employment Objective** and **€ 194 million** under the **European Territorial Cooperation Objective**. Between 2007 and 2013, in Belgium, a population of 1.28 million (12.4% of the total population) will live in the "statistical phasing-out" area under the Convergence Objective. Between 2000 and 2006, none of the population lived in regions supported under "Objective 1" (COHESION POLICY 2007-2013 NSRFs, 2008).

Figure 3 and 4. Eligible regions of Belgium for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/belgium/be_en.htm and http://ec.europa.eu/regional_policy/atlas2007/belgium/index_en.htm

The Walloon province of Hainaut will benefit from the Convergence Objective. The remainder of Belgium is covered by the Regional Competitiveness and Employment objective. In comparison to the 2000-06 period, Hainaut province will – due to statistical results – continue to benefit from the phasing-out objective. The entire country (excluding Hainaut) will benefit from the Regional Competitiveness and Employment Objective.

Bulgaria

For the 2007-2013 period, Bulgaria has been allocated **€ 6,853 million in total, € 6,674 million** under the **Convergence Objective** and **€ 179 million** under the **European Territorial Cooperation Objective**. Bulgaria's contribution to complement the EU investment under the National Strategic Reference Program would reach at least € 1,345 million in current prices. Between 2007 and 2013, the total population of Bulgaria of 7.8 million people live in Convergence regions, as all six regions of Bulgaria fall under the Convergence Objective.

Figure 5. Convergence Regions of Bulgaria for 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas2007/ bulgaria/index_en.htm

Cyprus

For the 2007-2013 period, Cyprus has been allocated approximately **€ 640 million**, of which **€ 213 million** under the **Cohesion Fund**, **€ 399 million** under the **Regional Competitiveness and Employment Objective** (phasing in), and **€ 28 million** under the **European Territorial Cooperation Objective**. All of Cyprus constitutes one NUTS II region, but according to Protocol 10 of the Accession Treaty, the Community acquis is suspended in the areas of the Republic of Cyprus in which the Government of the Republic of Cyprus does not exercise effective control. According to Protocol 3 of the Treaty mentioned, the British bases in Cyprus are not included in the eligible areas.

Figure 6 and 7. Eligible region of Cyprus for 2000-2006 and 2007-2013

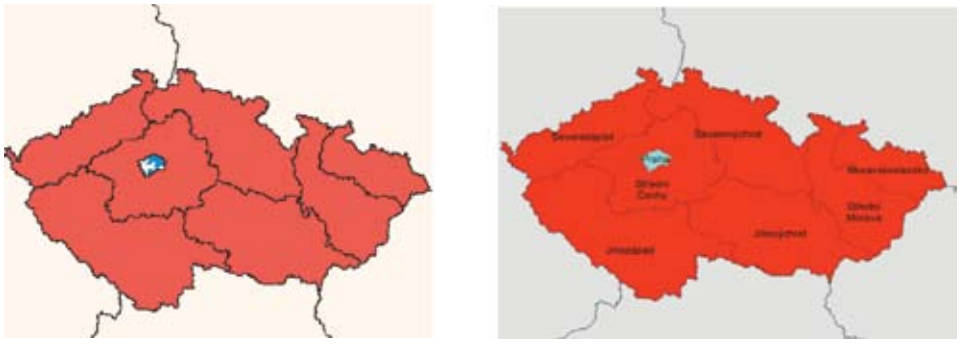
Source: http://ec.europa.eu/regional_policy/atlas/cyprus/maps/pdf/map_cy_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/cyprus/index_en.htm

Compared to the previous funding period, where only certain urban and rural areas were eligible for funding, in the new period all government controlled areas are eligible.

Czech Republic

For the period 2007-2013, the Czech Republic has been allocated **€ 26,691 million** in total, **€ 25.9 billion** under the **Convergence Objective**, **€ 419 million** under the **Regional Competitiveness and Employment Objective**, and **€ 389 million** under the **European Territorial Cooperation Objective** (COHESION POLICY 2007-2013 NSRFs, 2008). Central Bohemia, Central Moravia, Moravi Silesia, Southwest, Southeast, Northwest and Northeast regions fall under the Convergence Objective, while the Prague region is the only one falling under the Regional Competitiveness and Employment Objective. Between 2007 and 2013, 9.07 million people (88.5% of the total) will live in Convergence regions. Between 2000 and 2006, approximately the same percentage of the population lived in regions supported under "Objective 1".

Figure 8 and 9. Eligible regions of the Czech Republic for 2000-2006 and 2007-2013



Source:http://ec.europa.eu/regional_policy/atlas/czech_republic/maps/pdf/map_cz_en and http://ec.europa.eu/regional_policy/atlas2007/czech/index_en.htm

Denmark

For the 2007-13 period, Denmark has been allocated app. **€ 613 million, € 510 million** under the **Regional Competitiveness and Employment Objective** and **€ 103 million** under the **European Territorial Cooperation Objective**. All of Denmark is eligible for the Regional Competitiveness and Employment Objective. In the period 2000-06 the whole of the country was eligible only under the Danish objective 3 and EQUAL programs, whereas the Danish objective 2 covered 10.2 % of the population and 7.7 % of the population under "phasing out".

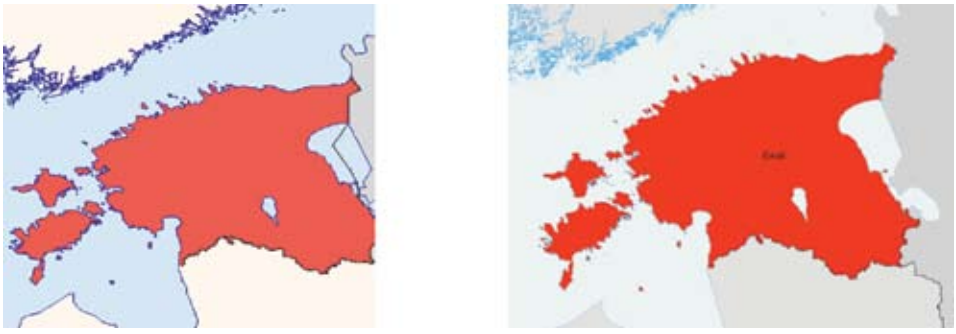
Figure 10 and 11. Eligible region of Denmark for 2000-2006 and 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas/denmark/maps/pdf/map_dk_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/denmark/index_en.htm

Estonia

For the 2007-13 period, Estonia has been allocated **€ 3,456 million**, **€ 3,404 million** under the **Convergence Objective** and **€ 52 million** under the **European Territorial Cooperation Objective** (COHESION POLICY 2007-2013 NSRFs, 2008).

Figure 12 and 13. Eligible region of Estonia for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/estonia/maps/pdf/map_ee_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/estonia/index_en.htm

All of Estonia is eligible for the Convergence Objective. Between 2007 and 2013, in Estonia, 100% of the population will live in Convergence regions. This is no change compared to the period 2000-2006 during which 100 % of the population lived in regions supported under "Objective 1".

Finland

For the 2007-13 period, Finland has been allocated **€ 1,716 million**, **€ 1,596 million** under the **Regional Competitiveness and Employment Objective** and **€ 120 million** under the **European Territorial Cooperation Objective**.

Figure 14 and 15. Eligible regions of Finland for 2000-2006 and 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas/finland/maps/pdf/map_fi_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/finland/index_en.htm

Between 2007 and 2013, in Finland, none of the population will live under the Convergence Objective nor statistical phasing-out. Between 2000 and 2006, 1.04 million (19.9%) lived in regions supported under "Objective 1".

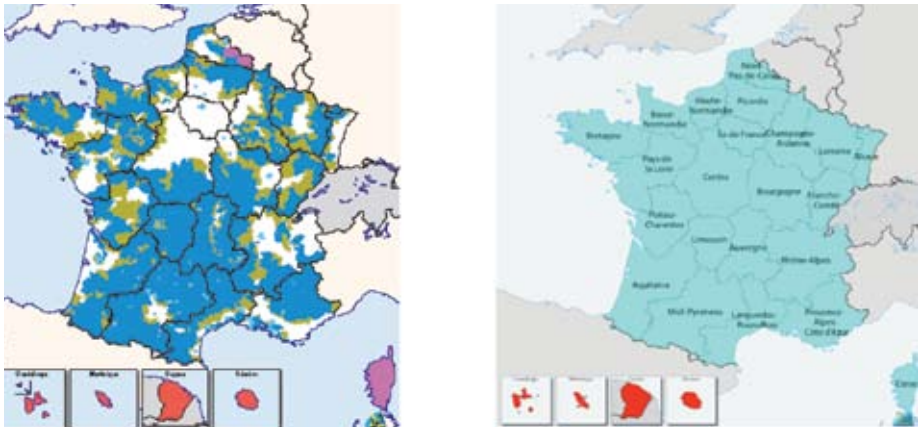
France

For the 2007-2013 period, France has been allocated **€ 14,320 million**, of which **€ 3,191 million** under the **Convergence Objective**, **€ 10.257 billion** under **Regional Competitiveness and Employment Objective** and **€ 872 million** under the **European Territorial Cooperation Objective** (COHESION POLICY 2007-2013 NSRFs, 2008).

The four overseas departments (DOM: Guadeloupe, Guyana, Martinique and Reunion) will receive support under the Convergence Objective. All regions of Metropolitan France will benefit from the Regional Competitiveness and Employment Objective.

As was the case during the 2000-06 period, overseas departments remain eligible for the Convergence Objective, however for the first time, the entire population of Metropolitan France is now entitled to funding under the Regional Competitiveness and Employment Objective.

Figure 16 and 17. Eligible regions of France for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/france/maps/pdf/map_fr_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/france/index_en.htm

Germany

For the 2007-2013 period, Germany has been allocated **€ 26.339 billion**, of which **€ 16.1 billion** under the **Convergence Objective**, **€ 9.409 billion** under **Regional Competitiveness and Employment Objective** and **€ 851 million** under the **European Territorial Cooperation Objective**.

Between 2007 and 2013, in Germany, a population of 15.26 million (18.5% of the total population) will live in Convergence regions (including 5.02 million or 6.1% in "statistical phasing-out" areas). Between 2000 and 2006, 13.57 million (16.4%) lived in regions supported under "Objective 1".

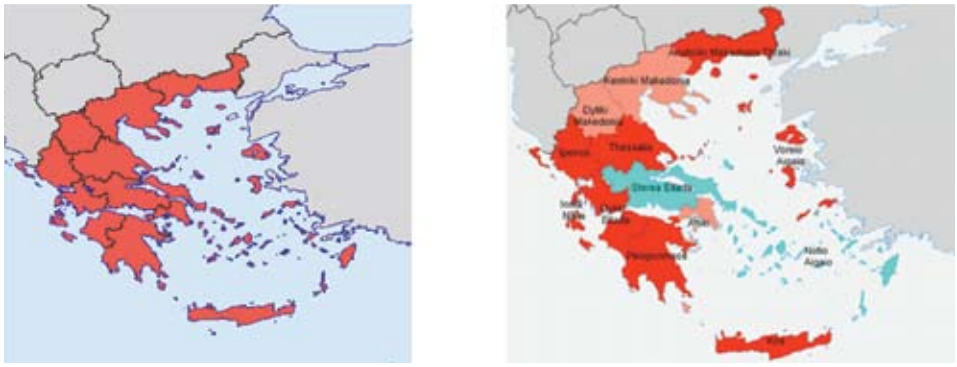
Figure 18 and 19. Eligible regions of Germany for 2000-2006 and 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas/germany/maps/pdf/map_de_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/germany/index_en.htm

Greece

For the 2007-2013 period, Greece has been allocated **€ 20,420 million** in total, **€ 19,575 million** under the **Convergence Objective**, **€ 635 million** under the **Regional Competitiveness and Employment Objective**, and **€ 210 million** under the **European Territorial Cooperation Objective**. Between 2007 and 2013, 10.16 million people (92.2% of the total) will live in Convergence regions, including 6.13 million in "statistical phasing-out" areas. Between 2000 and 2006, 100% of the population lived in regions supported under "Objective 1".

Figure 20 and 21. Eligible regions of Greece for 2000-2006 and 2007-2013

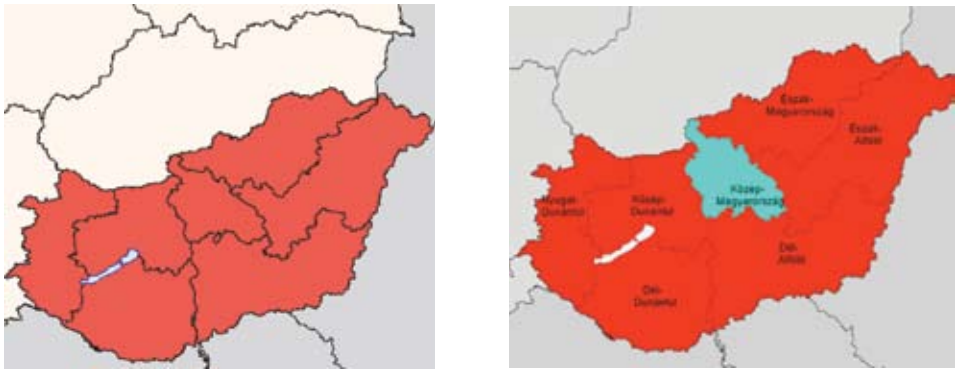


Source: http://ec.europa.eu/regional_policy/atlas/greece/maps/pdf/map_gr_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/greece/index_en.htm

Hungary

For the 2007-2013 programming period, Hungary has been allocated an amount of **€ 25,307 million** in total, **€ 22,890 million** under the **Convergence Objective**, **€ 2,031 million** under the **Regional Competitiveness and Employment Objective**, and **€ 386 million** under the **European Territorial Cooperation Objective** (COHESION POLICY 2007-2013 NSRFs, 2008).

Figure 22 and 23. Eligible regions of Hungary for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/hungary/maps/pdf/map_hu_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/hungary/index_en.htm

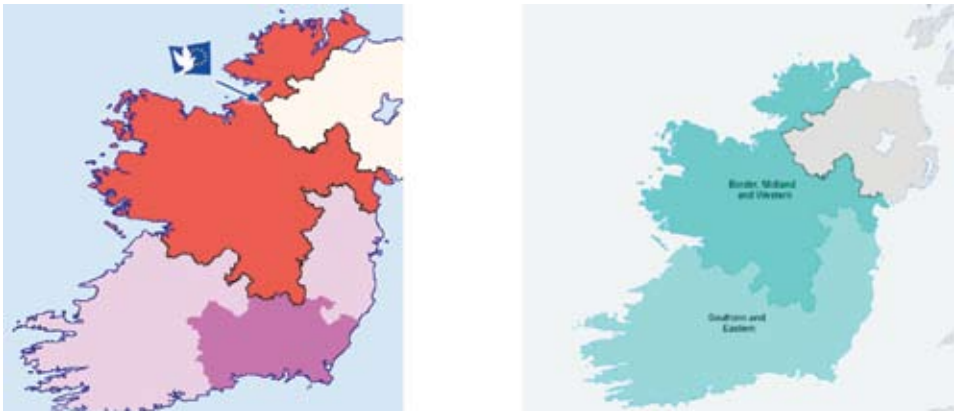
Out of the seven Hungarian regions, six fall under the Convergence Objective and one, notably the Central-Hungary region, under the phasing-in Regional Competitiveness and Employment Objective.

Ireland

For the 2007-2013 programming period, Ireland has been allocated an amount of **€ 902 million** in total, **€ 751 million** under the **Regional Competitiveness and Employment Objective**, and **€ 151 million** under the **European Territorial Cooperation Objective**.

Phasing-in regions: Border, Midland and Western Region. The funding from the ERDF is set at 228.7 million euros. (these areas are subject to special financial allocations due to their former status as "Objective 1" regions). **Regional Competitiveness and Employment Objective:** Southern and Eastern Region. Funding from the ERDF is set at 146.6 millions euros. In addition, there is a Human Capital Investment Operational Program receiving funding from the ESF, as specified above.

Figure 24 and 25. Eligible regions of Ireland for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/ireland/ie_en.htm and http://ec.europa.eu/regional_policy/atlas2007/ireland/index_en.htm

Italy

Italy, the third biggest beneficiary of EU cohesion policy after Poland and Spain, will benefit from **€ 28,812 million** during the 2007-2013 programming period for the **Convergence (€ 21,641 million)**, **Regional Competitiveness and Employment (€ 6,325 million)** and **European Territorial Cooperation Objectives (€ 846 million)** (COHESION POLICY 2007-2013 NSRFs, 2008).

The Convergence regions, namely Campania, Puglia, Calabria, Sicily and Basilicata (the latter is a "phasing-out" region), are the main beneficiaries of the cohesion policy allocations.

Figure 26 and 27. Eligible regions of Italy for 2000-2006 and 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas/italy/maps/pdf/map_it_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/italia/index_en.htm

Latvia

For the 2007-2013 programming period, Latvia has been allocated an amount of **€ 4,621 million** in total, **€ 4,531 million** under the **Convergence Objective**, and **€ 90 million** under the European Territorial Cooperation Objective.

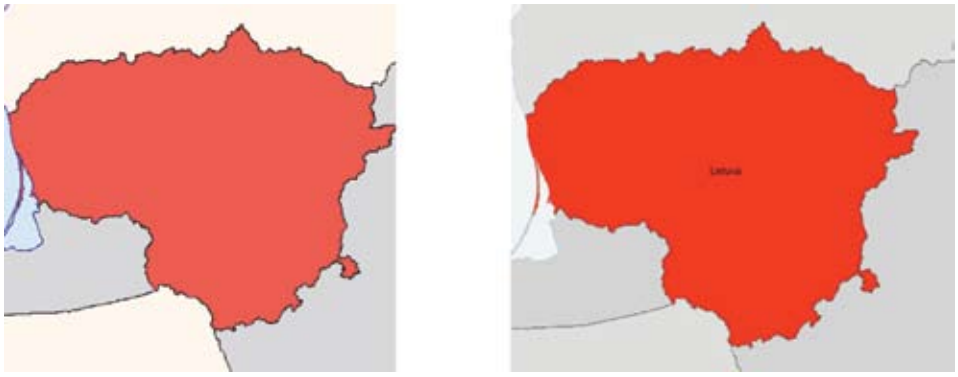
Source: http://ec.europa.eu/regional_policy/atlas/latvia/maps/pdf/map_lv_en.pdfand http://ec.europa.eu/regional_policy/atlas2007/latvia/index_en.htm

All of Latvia is eligible for the Convergence Objective. Between 2007 and 2013, in Latvia, 100% of the population will live in Convergence regions. This is no change compared to the period 2000-2006 during which 100% of the population lived in regions supported under "Objective 1".

Lithuania

For the 2007-13 period, Lithuania has been allocated **€ 6,884 million** in total, **€ 6,775 million** under the **Convergence Objective** and the **€ 109 million** under the **European Territorial Cooperation Objective**. All Lithuania is covered by the Convergence Objective.

Figure 30 and 31. Eligible region of Lithuania for 2000-2006 and 2007-2013

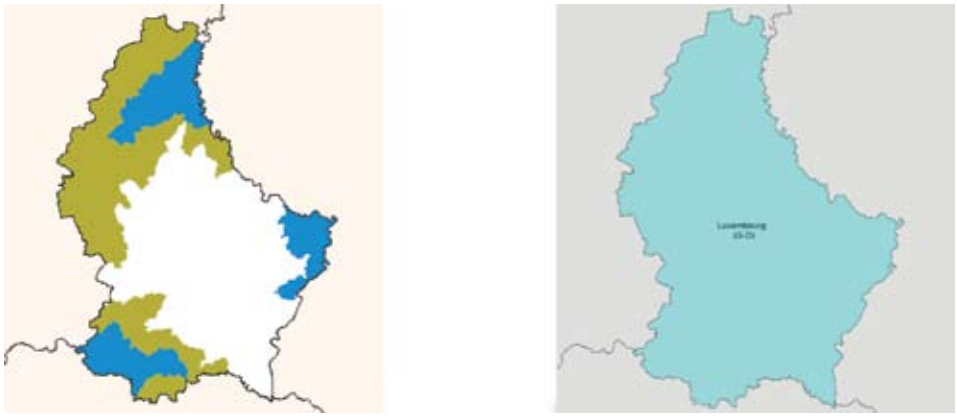


Source: http://ec.europa.eu/regional_policy/atlas/lithuania/maps/pdf/map_lt_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/lithuania/index_en.htm

Luxemburg

For the 2007-2013 period, Luxemburg has been allocated **€ 65 million** in total, of which **€ 50 million** under the **Regional Competitiveness and Employment Objective** and **€ 15 million** under the **European Territorial Cooperation Objective**. All of Luxembourg is eligible for the Regional Competitiveness and Employment Objective (COHESION POLICY 2007-2013 NSRFs, 2008).

Figure 32 and 33. Eligible region of Luxemburg for 2000-2006 and 2007-2013

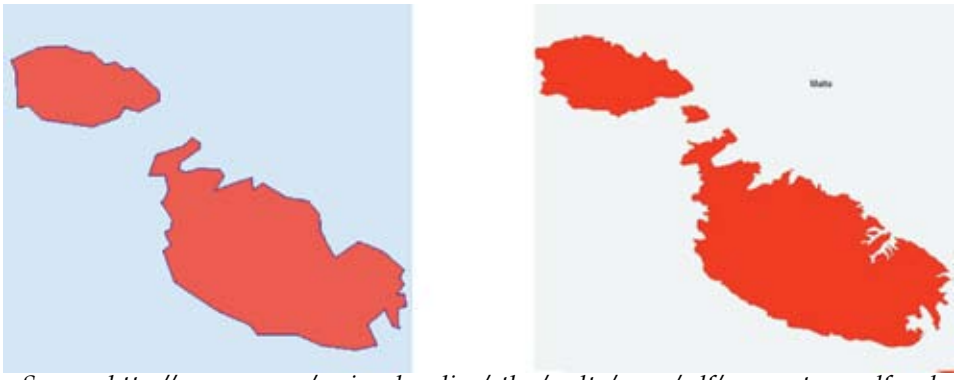


Source: http://ec.europa.eu/regional_policy/atlas/luxembourg/maps/pdf/map_lu_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/luxembourg/index_en.htm

Malta

For the 2007-2013 period, Malta has been allocated **€ 855 million**, **€ 840 million** under the **Convergence Objective** and **€ 15 million** under the **European Territorial Cooperation Objective**. All of Malta is eligible for the Convergence Objective. This is no change compared to the period 2000-2006 during which 100% of the population lived in area supported under "Objective 1".

Figure 34 and 35. Eligible region of Malta for 2000-2006 and 2007-2013

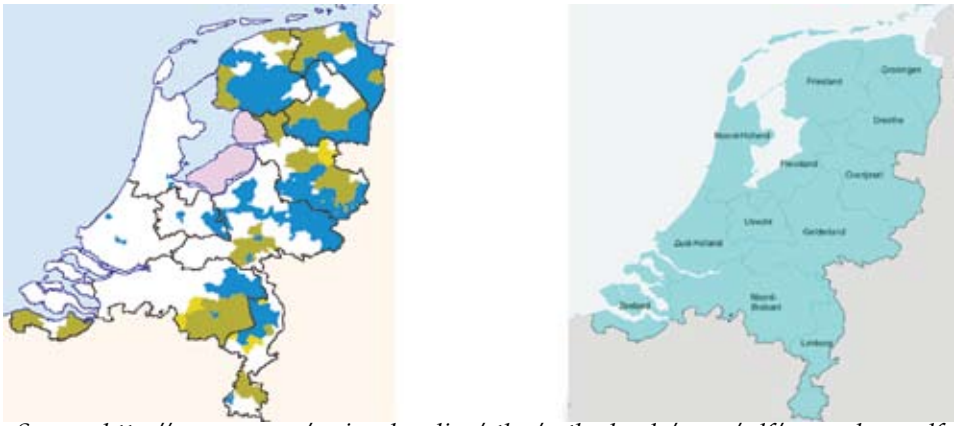


Source: http://ec.europa.eu/regional_policy/atlas/malta/maps/pdf/map_mt_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/malta/index_en.htm

The Netherlands

For the 2007-2013 period, Netherlands has been allocated **€ 1,907 million** in total, **€ 1,660 million** under the **Regional Competitiveness and Employment Objective**, and **€ 247 million** under the **European Territorial Cooperation Objective** (COHESION POLICY 2007-2013 NSRFs, 2008). All Dutch regions fall under the Regional Competitiveness and Employment Objective.

Figure 36 and 37. Eligible regions of the Netherlands for 2000-2006 and 2007-2013

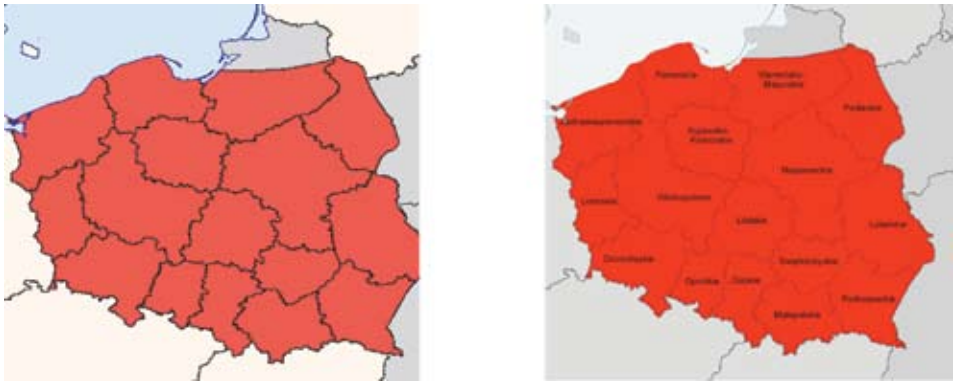


Source: http://ec.europa.eu/regional_policy/atlas/netherlands/maps/pdf/map_nl_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/netherlands/index_en.htm

Poland

For the 2007-2013 period, Poland has been allocated **€ 67,284 million** (the largest beneficiary of cohesion policy in 2007-2013): **€ 66,553 million** under the **Convergence Objective** and **€ 731 million** under the **European Territorial Cooperation Objective**. All regions in Poland are eligible under the Convergence Objective.

Figure 38 and 39. Eligible regions of Poland for 2000-2006 and 2007-2013

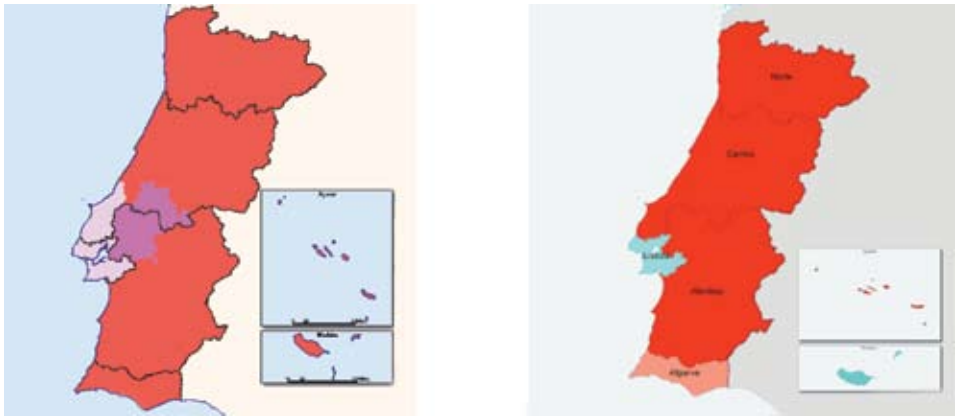


Source: http://ec.europa.eu/regional_policy/atlas/poland/maps/pdf/map_pl_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/poland/index_en.htm

Portugal

For the 2007-2013 programming period, Portugal has been allocated **€ 21,510 million** (current prices) of **Structural and Cohesion Funds** financing under the **Convergence (€ 20,473 million), the Regional Competitiveness and Employment (€ 938 million), and the Territorial Cooperation Objectives (€ 99 million)**.

Figure 40 and 41. Eligible regions of Portugal for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/portugal/maps/pdf/map_pt_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/portugal/index_en.htm

The situation has therefore changed from the previous 2000-2006 programming period, when the whole country – with the exception of Lisbon (phasing-out) – was eligible to the then Convergence Objective ("Objective 1").

Romania

For the 2007-2013 period, Romania has been allocated **€ 19,668 million** altogether, **€ 19,213 million** under the **Convergence Objective** and **€ 455 million** under the **European Territorial Cooperation Objective**. All regions in Romania area are eligible under the Convergence Objective.

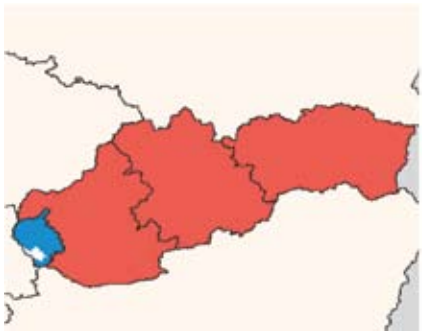
Figure 42. Convergence Regions of Romania between 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas2007/romania/index_en.htm

Slovakia

For the 2007-2013 period, Slovakia has been allocated **€ 11,588 million** in total, **€ 10,912 million** under the **Convergence Objective**, **€ 449 million** under the **Regional Competitiveness and Employment Objective** and **€ 227 million** under the **European Territorial Cooperation Objective**. Between 2007 and 2013, in Slovakia, 4.8 million (88.9% of the total population) will live in Convergence regions. This is no change compared to the period 2000-2006 during which 88.9% of the population lived in regions supported under "Objective 1". The regions of Western Slovakia, Central Slovakia and Eastern Slovakia fall under the Convergence Objective, while the Bratislavan region is the only region to fall under the Regional Competitiveness and Employment Objective. Between 2007 and 2013, 4.78 million people (88.8% of the total) will live in Convergence regions. Between 2000 and 2006, approximately the same percentage of the population lived in regions supported under Objective 1.

Figure 43 and 44. Eligible regions of Slovakia for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/slovak_republic/maps/pdf/map_sk_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/slovakia/index_en.htm

Slovenia

For the 2007-2013 period, Slovenia has been allocated **€ 4,205 million** (current prices) of **Structural and Cohesion Funds** in total, of which **€ 4,101 million** under the **Convergence Objective** and **€ 104 million** under the **European Territorial Cooperation Objective**. For the 2007-2013 period all of Slovenia is eligible under the Convergence Objective. The situation has therefore not changed in relation to the previous 2004-2006 programming period.

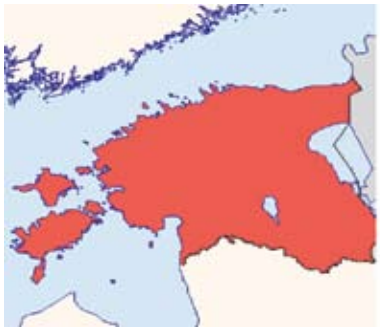
Figure 45 and 46. Eligible region of Slovenia for 2000-2006 and 2007-2013

Source: http://ec.europa.eu/regional_policy/atlas/slovenia/maps/pdf/map_si_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/slovenia/index_en.htm

Spain

For the 2007-2013 period, Spain has been allocated **€ 35,216 million**; **€ 26,180 million** under the **Convergence Objective** (of which € 3,543 million from the Cohesion Fund), **€ 8,477 million** under the **Regional Competitiveness and Employment Objective** and **€ 559 million** under the **European Territorial Cooperation Objective**.

Figure 47 and 48. Eligible regions of Spain for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/spain/maps/pdf/map_es_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/spain/index_en.htm

During 2007-2013, 16.3 million people will live in Convergence regions (37% of the total, 59% in 2000-2006).

Sweden

For the 2007-2013 period, Sweden has been allocated **€ 1,891 million** in total, **€ 1,626 million** under the **Regional Competitiveness and Employment Objective**, and **€ 265 million under the European Territorial Cooperation Objective**.

Figure 49 and 50. Eligible regions of Sweden for 2000-2006 and 2007-2013

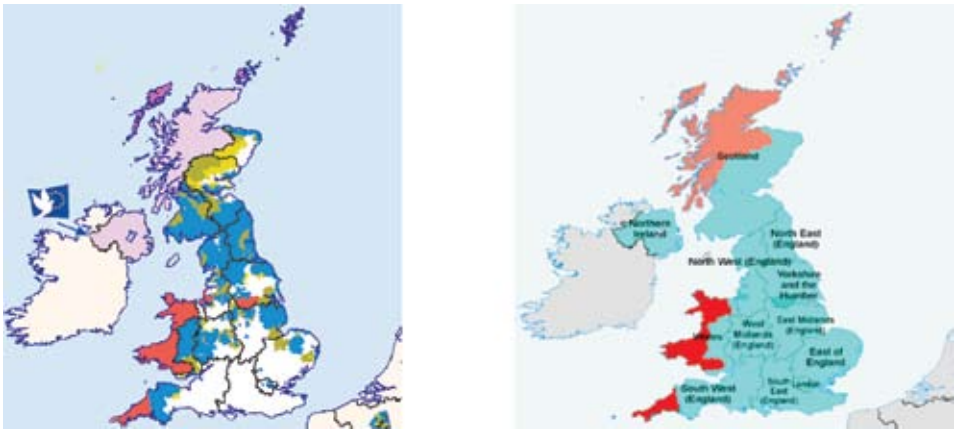
Source: http://ec.europa.eu/regional_policy/atlas/sweden/maps/pdf/map_se_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/sweden/index_en.htm

The whole country – i.e. all of its nine million inhabitants – will be covered by the new regional funds programs. There are eight European Regional Development Fund programs and one European Social Fund program; the latter being subdivided into eight regional plans whose geography matches those of the ERDF programs.

United Kingdom

For the 2007-2013 period, the UK has been allocated **€ 10,613 million** in total, **€ 2,912 million** under the **Convergence Objective**, **€ 6,979 million** under the **Regional Competitiveness and Employment Objective**, and **€ 722 million** under the **European Territorial Cooperation Objective**.

Figure 51 and 52. Eligible regions of the UK for 2000-2006 and 2007-2013



Source: http://ec.europa.eu/regional_policy/atlas/united_kingdom/maps/pdf/map_uk_en.pdf and http://ec.europa.eu/regional_policy/atlas2007/uk/index_en.htm

Conclusions

Between 2007 and 2013, 2.4 million people (4.6% of the total) will live in Convergence regions, plus 3 million (5 % of the total) in statistical phasing-in and phasing-out areas. 90.4% of the UK population will live in Competitiveness regions.

Based on the member states' shares of the allocated support and after having examined the strategic priorities of the countries we can see that all the countries have focused on the Community Strategic Guidelines of the European Union for the period 2007-2013, aiming at **improving the regions' competitiveness and increasing the employment, as well as maintaining sustainable development and modernizing the infrastructure**.

After looking at the maps of the eligible regions and comparing the two programming periods we can see **little difference**. Those regions which were eligible for the structural and cohesion funds between 2000 and 2006 have not reached great economic improvements and continue to be the target regions of the developments of the 2007-2013 period.

The regions, whose GDP per capita was under the 75% threshold, thus receiving most of the funds until 2006, still get most of the support, being Convergence Regions. The long term objective of the EU is to continue the

support of these less-developed regions and to help them catching-up with the developed ones, though it has not brought spectacular results so far in many of the regions.

In some countries we can see that due to their high level of development they received only little structural funds in the former period, i.e. there are not red regions in those member states, but due to the new regulations, the Competitiveness and Employment Objective aims at providing funds for these regions too, for example in Belgium, Denmark or Luxemburg. The developed regions may also get funds to improve their regional competitiveness further.

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Maps (downloaded on 15 December 2008):

http://ec.europa.eu/regional_policy/atlas2007/index_en.htm (downloaded: 15 Dec. 2008)
http://ec.europa.eu/regional_policy/atlas/austria/maps/pdf/map_at_en.pdf
http://ec.europa.eu/regional_policy/atlas2007/austria/index_en.htm
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REGIONAL INTEGRATION IN VOCATIONAL TRAINING AND ADULT EDUCATION IN THE SOUTH-TRANSDANUBIAN REGION

BEÁTA CSIMÁNÉ POZSEGOVICS

Introduction

One of the most important questions nowadays is that of the vocational training, which means the development of a social subsystem for the future generation. It is also a vital element for the innovative category, the basis of the structural change among professions and an essential factor for life-long learning. To solve the above mentioned tasks, the analysis of the system of vocational training and its possible directions has begun. As a result, the transformation has started however there are still some problems to solve for which further analysis and changes are necessary. A fundamental point in the employment policy is the development of a balance in the labour market. The equilibrium between supply and demand means that employment is provided for everybody in the market and the economy has its necessary human resource. In the achievement of these aims, the coordination of the employment policy and the educational policy has an importance. The analysis of the demand in the labour market has an important role in the development of the education. The statistics show that the structural differences between supply and demand have existed for years in Hungary. It also means that the high number of unemployed is a result of not only the existence of unskilled people but also those skilled workers whose profession do not match the need of the market. To achieve the equilibrium between supply and demand, more programs have begun and are in progress. The European Union has drawn for Hungary to improve the efficiency and flexibility of the educational system, since this way we can adjust to the demands of the labour market and we can reduce the rate of dropping away at schools.

The regional integration of vocational schools serves the satisfaction of the needs of the economy through the educational system. The aim of my study is to evaluate the work done with regards to the Regional Integrated Vocational Centres: in what extent do these meet the expectations. I would also like to call attention to the tasks not totally elaborated according to which the regional integration of vocational training has been theoretically accomplished, however its practical efficiency can not be considered successful.

Material and methodology

I used primary and secondary data source in my study. First, I analyzed the documents available. I studied the relationship between training and employment and the directions of development in the South-Transdanubian Innovative Strategy, in the National Employment Action-plan and in the Vocational Development Strategy 2005-2013. After that I used the Human

Resource Development Operative Program (HRDOP) 3.2.2. and 4.1.1. calls for application and the winner applications in the South-Transdanubian region. After the analysis of the documents it was necessary to make an interview with the associates of the two Regional Integrated Vocational Centres, the winners of the application process. The interviews contained partially structured questions and were influenced by responses given to the predefined main questions.

Results

The relationship between employment and education

The National Employment Action-plan draws the task to improve the mechanisms that ensure the continual adoption to the demands of the labour market in order to improve the quality of education, and *the relationship between teacher training and the economy has to be strengthened*. (NFA, 2004) The comprehensive development of the vocational system is going to meet these requirements since each analysis shows that the structure of the vocational training could not catch up with the demands of the economy. It was not fast and flexible enough; what is more, the standard of technical training is also very low. The reason of the basic problems is the followings:

- the number of trainings in the National Training Register was too high,
- the contents of the vocational training did not match the demands of the economy,
- as a result of the disorganisation of the system of institutions,
  - the training institutions can not cooperate with the most important members of the region,
  - the modern methods and instruments are missing or not emphasized in their system of management;
  - the sources available are not applied effectively;
- numerous institutions can not improve effectively their training programs and materials because of their small size;
- The vocational exams do not fulfil the requirements of quality assurance, since the exams are taken in the training institutions; it is a serious problem in case of the technical exams, since the training workshops of schools and companies are equipped at different levels, so these can not provide equal conditions for the evaluation. (SZFA, 2004)

The cooperation among schools is a possible solution for the institutional problems of vocational training and also for the problems regarding the content of training. Some projects have already been made as experiments within programs supported by the World Bank, PHARE, bilateral agreements and multinational companies as a result of which a more organized institutional cooperation has developed. However, these programs were organized on the level of professional groups; the regional cooperation did not characterize

them. These projects meant investments in tools as well, which on the one hand strengthened the technical training in the school, on the other hand further increased the inequality among the institutions. After the accession to the European Union, regarding the reception of sources, the development of cooperation among institutions has a significant role. In order to help this procedure, the subject of the National Development Policy Human Resource Development Operative Program Action 3.2.2. and 4.1.1 was the organization and operation of the Regional Integrated Vocational Centre (RIVC).

The aim of regional integration

As a result of the integration in the region, the need for a new organisational and management form has developed. This new managing form is a consortium or any other non-profit centre with the cooperation of the operators of six-eight vocational institutions. The aim set in the HRDOP application is that the RIVC should provide a vocational training within and out of the school system that is able to keep up with the new needs of the labour market. This way the conditions for the life-long learning are assured for the whole population in the region. The RIVC should also provide more effective coordination in the training supply regarding the expenditure of sources at both regional and local level. It should serve as the base for the modular and practice-oriented training, while the parallel capacities should be reduced or even eliminated. The proportion of students taking part in the technical training at the company workshops should be raised.

Further tasks for the RIVC to provide adult education, partial vocational training besides the vocational training and it should ensure the possibility for the unprivileged, the gipsy and the handicapped students to enter the vocational training and help them increase their chances for taking part in the adult vocational training. The integration should help create a unified system of exams while providing equal conditions for evaluation among the institutions of the RIVC.

A Regional Integrational Vocational Centre can come into existence with six-eight vocational institutions which can keep their legal independence totally or partly. The institution can be formulated by merging or terminating more institutions or member institutions. A RIVC needs to have:

- a non-profit organization responsible for management,
- a modern training centre with high-tech equipment,
- Six-eight institutions practising vocational training or six-eight member-institutions. (HEFOP, 2004)

The six-eight institutions practising vocational training can be secondary technical school, vocational school, specialised vocational school, skill-developing vocational school or a higher institution that providing tertiary qualification. A higher institution providing tertiary qualification can take part in the RIVC only according to the agreement with the maintainer.

There is a stipulation that the schools that take part in the integration can not be more than 90 minutes far from the regional centre by means of public

transportation. In the training centres the students of the institutions operating in the region receive practical and theoretical job-oriented training for which the necessary high-tech equipment is not available at schools. The training centre operates with the agreement of those taking part in the cooperation at the immovable of one participant, or the property of one of the maintainers.

With the help of the HRDOP improvements have been implemented: buildings have been enlarged and reconstructed, the necessary technical devices have been procured. All these steps are in harmony with the practical and theoretical training and the demand of the labour market and fulfil the educational requirements in the institutions providing vocational training where no high-tech devices are available.

Thos Regional Integrated Vocational Centres formed before 1st September 2007. have to be transformed before 1st January 2010. according to the section 42. of act CII. year 2007. referring to the reform program of vocational training and adult education. After 1st January 2010. if the maintainer of a RIVC neglects this duty, the institution will not be entitled to get any contribution from the sources of financial support for development. This subsidy is transferred not directly for the institution but for its maintainer (association, non-profit economic society). Those institutions that do not partake in the RIVC will not be given any subsidy from 1st January 2007. (with the exception of specialised vocational schools and skill-developing vocational schools). This subsidy can be given only for supporting vocational training from 1st January 2007. The subsidy can be applied for on the condition that the average number of the students in the institutions within the RIVC is not less than 1500 in 3 years.

Regarding the system of financial support, the input system is in practice at present. It would be necessary to differentiate the support according to the vocations since every institution offers marketable jobs. Every student prefers learning some fashionable vocation; however the vocations for which there is demand in a region are the same in each region. Making these missing vocations attractive would be possible if the institutions got higher subsidy for those students that choose to learn one of these jobs. The institutions would be motivated to school students for the jobs needed and the students could also get more financial support.

The New Hungary Development Plan aims to call into being further 30-35 RIVCs between 2007 and 2013 in order to strengthen the relationship between education and the economy. These Vocational Centres could be the base of the independent regional exam centres that could provide a unified system of evaluation. The 16 Regional Integrated Vocational Centres that were organised according to the program of the National Development Plan includes 128 institutions. If it was possible to enlarge the system from2007 to 2013, it would affect 180-280 vocational institutions. This way 400 vocational institutions could get support from the sources of the European Union.

In order to achieve this goal, the characteristics of the RIVCs are the following:

- The use of high-tech devices and equipment
- A coordinated management with the division of functions
- Operation suitable for the vocational base
- The strengthening of technical training in the region
- Help framing the system of school workshops
- Providing social functions for the students which mean complex services like job orientation, career-counselling and services for those at a disadvantage.

Regional cooperation in the training

The modern institutional network is going to ensure the effective operation of the vocational training and provide possibility for *the harmonisation of vocational training not only at local but also at local and regional* level n order to reach the requirements of the region.

It is extremely difficult to develop the economic communication at regional level. The subsidizing system doe not make the maintainers and the vocational institutions interested in meeting the demands of the economy. The institutions are not motivated to cooperate with each other. However, the economy does not make the planning easy since most of the companies can indicate their needs only for the short run. On the other hand, although the chambers and the job centres have a good relationship with the companies and the schools, the co-operation of schools and companies is not realised.

The relationship among the Regional Development and Vocational Committees and the RIVCs

The strengthening of the relationship between the economy and the vocational training is expected from the new role of the RDVC. (DDRIS 2004) The formation, compound and operation of the RDVC are regulated in section 33 CII. year 2007. which also refers to the new tasks in connection with the coordination of vocational training:

- It works out the direction of the vocational training within the school system which is connected to the regional development program of the area with the condition that the RDVC has to co-operate with the RIVCs, chambers, job centres and vocational training centres.
- The section 16. of act XXI. year 1996. regulates the Regional Development Councils, whose task is to plan the regional development concept.
- The RDVC decides the direction of improvements of vocational training and the rate of schooling in the region.
- It has a significant role in the harmonization of vocational training.
- One of its tasks is to initiate the organization of vocational training affiliates at the local governments.

The RIVCs organised in the South-Transdanubian region

The improvement of human resource has a significant role in the development plans of the South-Transdanubian region. The ideas are greatly influenced by the characteristic features of the region as well as the number of students that leave the institutions a year, the capacity of the region to keep the labour force. The improvement of human resource is one of the first tasks, since it can provide the possibility for effective investments in the infrastructure and in the manufacturer industry.

The most important device for this is the vocational training which includes the secondary vocational training within the school system, the tertiary education and the adult trainings as well. Baranya County has a leading position in the region because of the versatility of its secondary vocational training possibilities and its ability to meet the demands of the labour market. When analysing the situation of the other two counties, Tolna County is evidently in a handicapped position because of the rate of migration and the anachronistic system of its vocational training. The aim of the Kaposvár-RIVC and Pannon –RIVC are going to improve this situation. (Appendix 1.)

In the interviews that I made at the two Vocational Centres I was going to find whether the aims set at the beginning were fulfilled or not. The centres operating as vocational training places lived up to expectations, the modern, well-equipped workshops were popular among teachers and students as well. The schools at the centres use the workshops continually, while the other schools in the region use them in vocational blocks.

As part of the adult education the further training and retraining of teachers have been realised in order to provide new materials and reduce dropping away of students. The new trainings are the tasks for the future but the accreditation of the adult education program is already accomplished. Within the adult education the centres are going to supplement the sources for maintenance by providing trainings that take into consideration the labour market; however this way they will become competitors of the schools belonging to the Vocational Centre, since they also offer these kinds of training. By the way, this activity is not in harmony with the aim se tat the beginning according to which the Vocational Centres will focus on technical training only. Regarding social functions the training centres do well at career-counselling and job orientation; however the system of follow-up activities is not elaborated. The centres are not going to put emphasis on this activity, since the schools deal with this task. There is still deficiency regarding organisation of trainings and eliminating of concurrent trainings, since the Vocational Centres do not have their clarified jurisdiction, these do not have the right to make decisions or direct the institutions, so it can not function properly.

Regarding the organisation of trainings the member schools should give up their independence. The institutions are afraid to give up this role; they rather consider that the Vocational Centres are responsible for further trainings and social functions. The provisions for the labour market are not

proper in the region, since the chambers can not give the necessary information and the companies that provide the workshops for the technical training are not good at communicating their demands. One task of the Vocational Centres is to keep in contact with the participants of the economy in order to make the technical training as effective as possible and in order to estimate the need of the economy, but because of lack of sources, these tasks can not be fulfilled. The sustainability of the organisation and the training centres is also a problem.

Conclusions

The role of the organisations is not well-described; the right for making decisions and the necessary sources are missing. The sustainability of RIVCs has to be guaranteed financially and legally as well. The relationship with other training organisations, the regional training centre and the job centre has to be clarified, since it is not explicit whether there will be some kind of merging or co-operation or the different training institutions will have to compete with each other especially in the field of adult education. The future of the schools that do not take part in the RIVC program is still questionable. How significantly will the centre attract the students from the small towns in the country? Will it endanger the existence of the local vocational schools there? The relationship of the institutions within and out of the RIVC is not clarified just as their financial situation.

Will these schools decline, disappear or be integrated? How will the coordination work with the maintainers who have financial difficulties themselves? So far job centres, chambers and independent experts have done surveys regarding the needs of the economy. When the RIVCs were organised, these tasks were divided among them and the Regional Development and Training Committees as well. Who will provide the data in reality? It is still not clear who will organise the RIVCs into a system, what will be the role of the representatives of the different regions and whether the interests will ever be synchronised. The existence of the Regional Integrated Vocational Centres makes it possible to coordinate vocational training and the adult education within the regions. However, as long as the above mentioned problems remain unsolved, the tasks set in the documents can not be properly fulfilled.

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IS THE CAP REALLY A COMMON POLICY? – A COMPARATIVE ANALYSIS OF CAP SUPPORTS IN THE EUROPEAN UNION

DÓRA ILLÉS

Introduction

In this study, I analyse and compare the planning and implementation of one of the most important common policies of the European Union, the common agricultural and rural development policy. Today, at the end of 2008, the research of the topic is very much on the agenda from several points of view. The EU has faced a global reform since the beginning of the 2000s. Within the framework of the global reform, the two most critical issues are the common agricultural policy and the cohesion policy.

Both policies will be revisited during the years 2009-2010. The preparations of this revision have started already in 2008. The background of this revision is that both the Commission and the Member States want to reform and transform both policies to a certain extent (but in a different manner). Concerning the agricultural and rural development policy, the Commission initiated the so-called health check.

What I want to examine especially is that what the priorities of member states are by implementing EU rural development policies. On the one hand I compare the share of direct payments and development-oriented programme supports in the individual member states and the reasons or background of the differences in these shares. On the other hand, I analyse that what the preferences of the member states were by allocating the earlier SAPARD and new Rural Development Fund (EAFRD) according to measures and actions.

EAFRD versus direct payments

Many important changes to the CAP were already made in the 1980s but, above all at the beginning of the 1990s. Production limits helped reduce surpluses (milk quotas in 1983). A new emphasis was then placed on environmentally sound farming. Farmers had to look more to the market place, while receiving direct income aid, and to respond to the public's changing priorities. This was the MacSharry reform in the framework of which a shift was achieved from the price support towards the income support distorting less the market processes (KOVÁCS, 2003).

The agriculture does not only produce food, but also preserves the culture and shapes the landscape structure. This approach is emphasized by the fact that the rural development became the second pillar of the CAP and in consequence of this, its proportion within the budget of the CAP increases as well. In the 2000-2006 programming period, new support schemes appeared concerning the rural development and agricultural restructuring.

These new support schemes are the production of bio-products or the programmes supporting the non food producing activities (HORVÁTH, 2001). Finally, in 2003 a further fundamental reform was agreed, in the framework of which additional actions were taken by the Commission to reduce direct payments through introducing the single farm payments and the increasing of the resources of rural development.

The EU agriculture policy has had two main instruments: the Guarantee section and the Guidance section of the European Agricultural Guidance and Guarantee Fund (EAGGF). The Guarantee section financed the market and price policy of which the largest proportion constituted the direct payments which served in the beginning to compensate the losses caused by the reduced prices.

Currently, the direct payments constitute the main proportion of the agricultural support and their function is not any more the compensation, but the support the living standard of the rural inhabitants which make them more independent from the quantity of the products. The Guidance section financed the structural policy.

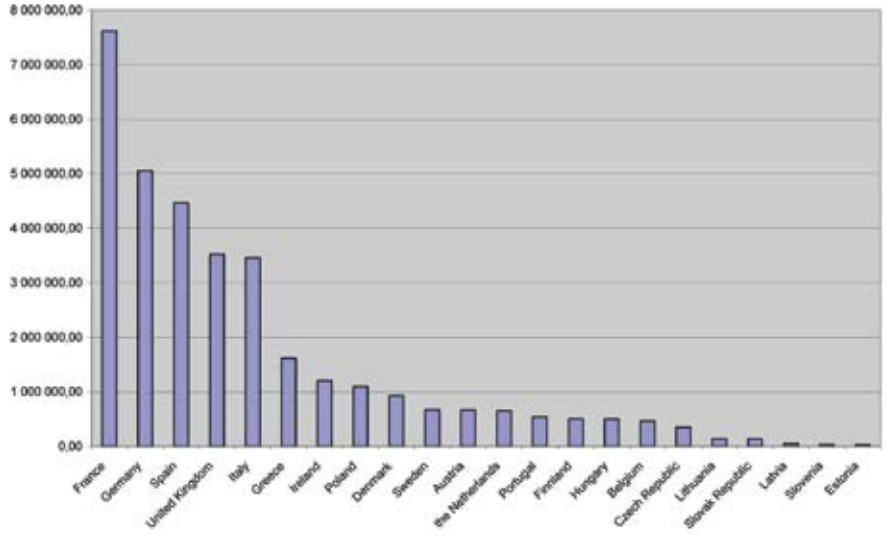
The early intention was that the Guarantee section would be larger than the Guidance section by a ratio of two or three to one, but, in practice, this has never been even remotely approached, and the Guidance section hovers somewhere in the region of only 8 per cent of total EAGGF expenditure. In the 90s, the Guarantee section constituted 90-94% of the total EAGGF expenditure and currently the situation is the same in some countries.

The demand on the Guarantee section occasioned by high EU prices is the main reason for this imbalance. A second reason is that, unlike expenditure on price support, expenditure on structural measures is not wholly financed by the EAGGF but is co-financed – usually by the EU in partnership with either member states or regions. And a third reason is that member states have not always been enthusiastic supporters of EU agricultural structural policy – mainly because it usually involves contraction of the sector and/or bringing about changes to which agricultural interests are opposed (NUGENT, 1994).

What the European Commission has never succeeded in achieving in the case of the old member states – increase the proportion of development, restructuring to one third -, it has been achieved, or "overachieved" immediately in the case of the new member states in 2002. The new member states will be integrated completely into the direct payments scheme gradually, within 10 years, so this means less direct payments in the firs years. The differentiation of the old and new member states and the phasing-in process made for the Commission possible to use the "saved resources" for rural development measures.

On the chart below, we can see that the high share of direct payments mentioned above has not changed in some older member states: more than half of the agricultural expenditure is made up by the direct payments in Denmark, the Netherlands, France and Germany. Five countries receive 75 per cent of the total agricultural direct payments expenditure (the largest proportion is received by France).

Figure 1. The yearly allocation of the direct payments in the member states in 2007-2010 (€)



Source: Own editing on the basis of http://ec.europa.eu/agriculture/fin/directaid/2006/annex1_en.pdf

The picture is different in the case of EAFRD support. The largest beneficiary is Poland. Its support from this source is extremely high, twice as much as that of Germany which is ranked second. There are twelve countries which get more than half of their agricultural support from the EAFRD and each of them is new member states. Hungary represents the "borderline" where the two kind of support is almost 50-50%.

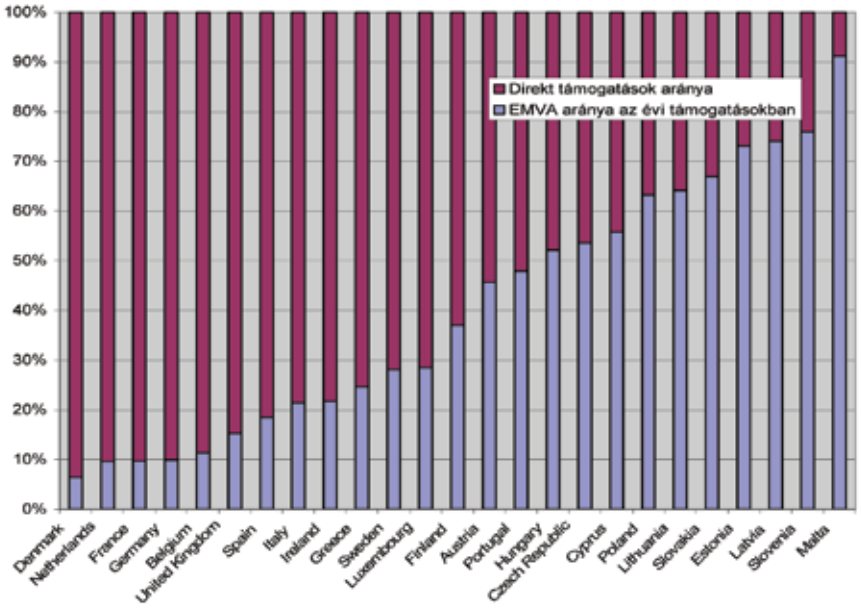
The new regulation at the beginning of 2000s and later in the 2007-2013 programming period contained several new elements compared to the earlier one:

- Modulation from 2006 until 2012 of 1% up to 19% of direct payment.
- Degression: no modulation of direct payment until 5,000, medium degression between 5,000 and 50,000 €, total degression if more than 50,000 €.
- A share of 1 up to 6% of modulation will be transferred to pillar 2 support, redistributed for rural development purposes and allocated according to welfare criteria to the individual regions (ZEDDIES, 2003)[1].
- From 2007, the budget of the total rural development has been transferred from Structural Funds to the Common Agricultural Policy, under budget heading No.2 "Preservation and management of natural resources". In the past, when a large part of rural development subsidies belonged to the cohesion policy, there were also problems with the demarcation

[1] On 20-21 November 2008, the ministers responsible for Agriculture and Rural Development required to repeal this action and they achieved a half success. This moment signifies the interest of ministers for agriculture in maintaining the direct payments.

of competences between the different operational programmes. Now that the support to rural areas is divided between two totally different schemes (Cohesion and Structural Funds on the one side and CAP on the other), the coordination, the demarcation of the scope of assistance involves even more conflicts and problems. There is a real danger that the non agricultural rural development tasks remain without host.

Figure 2. The proportion of direct aids and the EAFRD in the supports of the member states 2007-2010 (%)



Source: Own editing on the basis of http://ec.europa.eu/agriculture/fin/directaid/2006/annex1_en.pdf

The structure of EAFRD support

The rural development policy in the 2007-2013 period is based on 4 major themes (axes). These themes (axes) are the following:

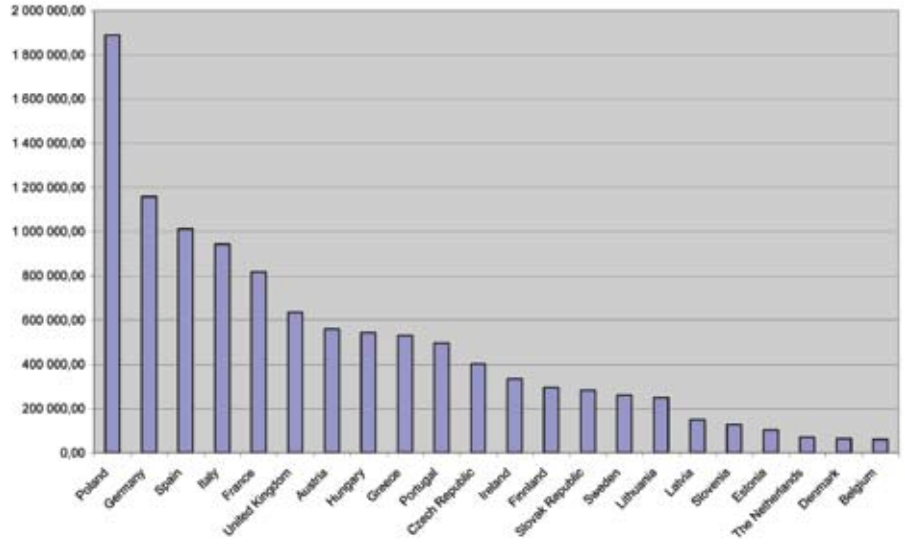
1. Improvement of the competitiveness of agriculture;
2. Improvement of the status of the environment and land use;
3. The improvement of the living conditions and the diversification of the economy in the rural areas;
4. The so called LEADE axis, based on the experiences of the former programming period. Its aim is the implementation of local rural development strategies through local partnership of the public and private sphere.

The allocation of EAFRD was determined by several factors:

- the size of agricultural land;
- the employment in the agricultural sector;
- a minimum , support for „convergence" regions;
- past performance;
- special situations and circumstances;
- the total sum of support – together with the cohesion and structural funds (CA, ERDF, ESF) and HOPE support, should not exceed a defined percentage of the GDP of the country. In case of Hungary it is 3,54 percent (defined in the Commission Regulation 2006/636/EC, 12. September 2006.)

Consequently, the allocation of EAFRD according to member states reflects a rather mixed picture, shown in the diagram below:

Figure 3. The average yearly support of EAFRD in the member states 2007-2010 (€)



Source: Own editing on the basis of http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

Poland receives by far the largest rural development support among member states in the 2007-2013 period. It is followed by large old member states (Germany, Spain, Italy, France, UK), having large population, agricultural potential and also convergence regions. Hungary is in the middle group, but rather in the first third of countries. Unambiguously, EAFRD in new member states has a much larger share and importance than direct payments. The share of new members in total EAFRD allocations is 25 percent, while in respect to direct payments this percentage is only 7%.

Just because of the larger significance of the EAFRD in the new members, it is worth to have a look on the utilisation of the pre-accession support SAPARD in these countries. Regarding that SAPARD actions and EAFRD actions are defined a bit differently, I regrouped SAPARD supports in order to match the axes-subdivision of EAFRD funds. The results for the period 2000-2006 are shown in the table below:

Some conclusions can be derived from the table above:

- The first – rather astounding – experience is the very low, or even no spending for environmental and land use improving measures ((axis II.) in the new member states. With the exception of the Czech Republic and Slovakia this spending is equal to zero in all other countries. This experience should have motivated the European Commission to the decision, to oblige member states to spend a certain percentage of their EAFRD allocation on agro-environmental measures. In the 2000-2006 period, all new member states used the largest part of their allocation for enhancing of the production and processing of agricultural products.
- The second main experience is the relatively high percentage share of the third axis: the development and reconstruction of rural infrastructure and the diversification of employment. It seems that the fear, agricultural government agencies will support only agricultural measures in the narrower sense of the word, was unfounded, at least in the case of SAPARD. Especially Romania, Poland and Hungary devoted a fairly large percentage of their support to this axis: these are the countries where rural infrastructure was really in urgent need of these resources. It has to be added, however, that SAPARD support was generally too restricted to generate perceptible changes in this field.

Table 1. SAPARD support according to axes 2000-2006 in percentages

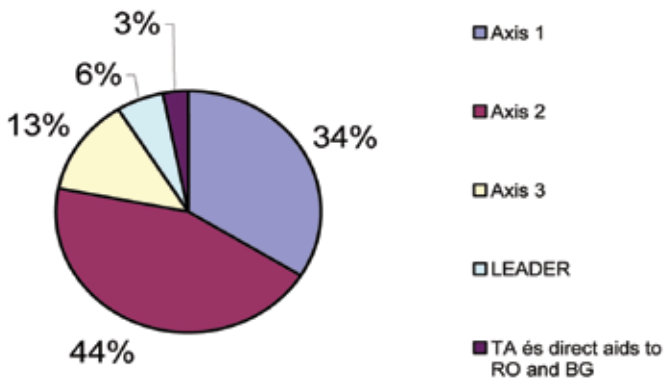
Countries	I. axis	II. axis	III. axis
Bulgaria	67,9		17,96
Czech Republic	39,1	17,1	24,4
Estonia	74,5		6,8
Hungary	68		31,6
Latvia	65,6		8,8
Lithuania	76,6		17,7
Poland	48,2		41,8
Romania	40,39		51,65
Slovakia	65,1	10,1	16
Slovenia	74,3		12,1

The sum of the percentages is less than 100, because some actions could not be assigned to any of the axes.*Source: Rural Development in the European Union, Statistical and Economic Information, Report 2007, European Union DG Agriculture*

Based on the past experiences, the EU Commission defined some minimum percentages in the new, 2007-2013 programming period, to be allocated to the three axes. The highest minimum level - 25 percent - was defined for axis II (environmental measures), the measures so neglected by new member states in the previous period. The minimum constraint for axes 1. and 3. are 10-10 percent, and 5 percent for axis 4. These minima determine only 50 percent of the total national allocations; the other 50 percent is allocated according to the preferences of the member states.

The final result of national allocations is the following (for the EU as a whole): 34 percent has been allocated to axis I. (promotion of the competitiveness of agriculture and forestry), 44 percent – the largest share – was allocated to axis II. (Environment and land use), 13 percent to axis III. (Improvement of the quality of life and diversification of employment in rural areas), and 6 percent for LEADER.

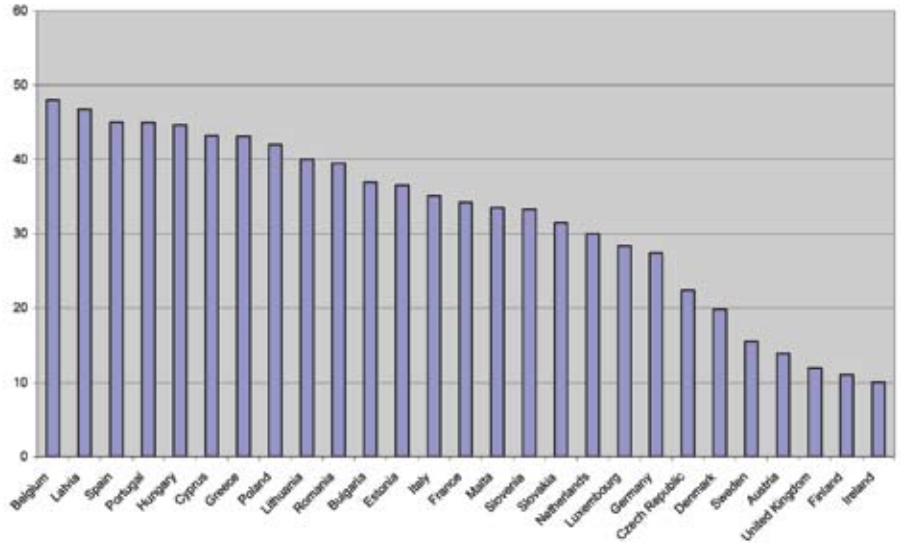
Figure 4. Total EAFRD expenditure 2007-2013 by axis



Source: The EU Rural Development Policy: Facing the challenges, European Commission, 2008

The EAFRD resources had to be allocated in the framework of National Rural Development Plans or Programmes in the individual member states (like NSRF and operational programmes for Cohesion Fund and Structural Funds supports). In some large countries, Rural Development Plans had to be prepared in regional breakdown (Germany, Spain, Italy, and United Kingdom). All the other countries prepared a single Rural Development Plan.

Figure 5. Proportion of axis 1 (Improvement of the competitiveness of the agriculture and forestry) within EAFRD by country (%)



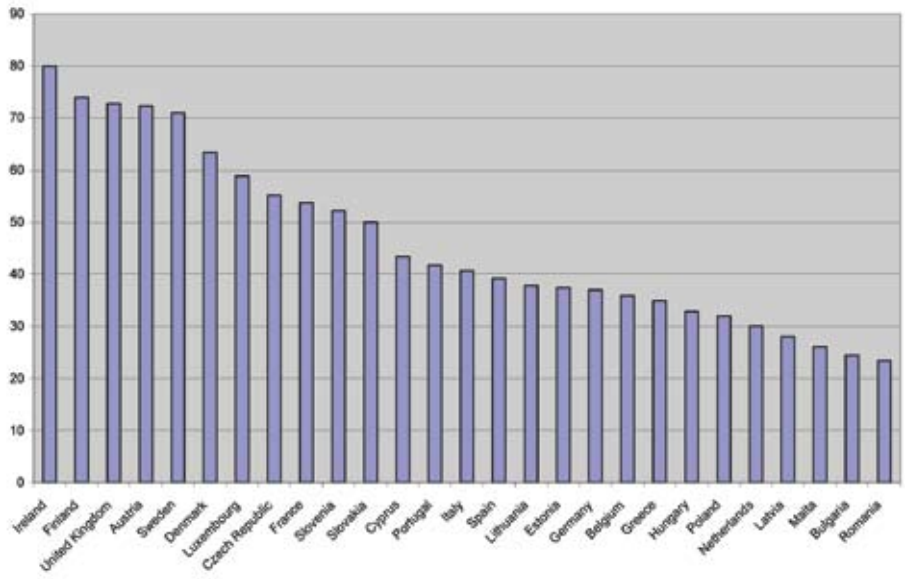
Source: Own editing on the basis of http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

12 member states allocated the largest share of their EAFRD resources to axis I., the enhancement of the physical and human capital of agriculture. This group of 12 consists almost exclusively of new member states and „old" Mediterranean cohesion countries (the only exception is Belgium). The main aspiration of these countries was to enhance the competitiveness of their agriculture, to catch up with the more advanced Northwest European member states. Nevertheless, it has to be noted, that the overwhelming part of the resources is spent for physical capital improvements, only a very small fraction was spent on human capital enhancing measures (like the entry of young and exit of old farmers).

Most member states allocated the largest part of resources to the second axis (environment and land use). This allocation was motivated by different factors:

- Environmental awareness: countries, where environmental problems are highly placed in the political agenda belong mostly to this group;
- LFA regions: the support of less favoured areas is assigned to this axis. Therefore countries with large areas eligible for LFA support, belong generally also to this group;
- Farm size: according to experiences, countries with large average size of farms and farms are better equipped with capital, can afford themselves more to care for the environment, than countries with small farms, where farmers are wrestling for survival. This may be the reason why spending on Axis 2 projects are substantially higher in the Czech Republic and Slovakia than in other new member states.

Figure 6. Proportion of axis 2 (Improvement of the environment and countryside) within EAFRD by country (%)

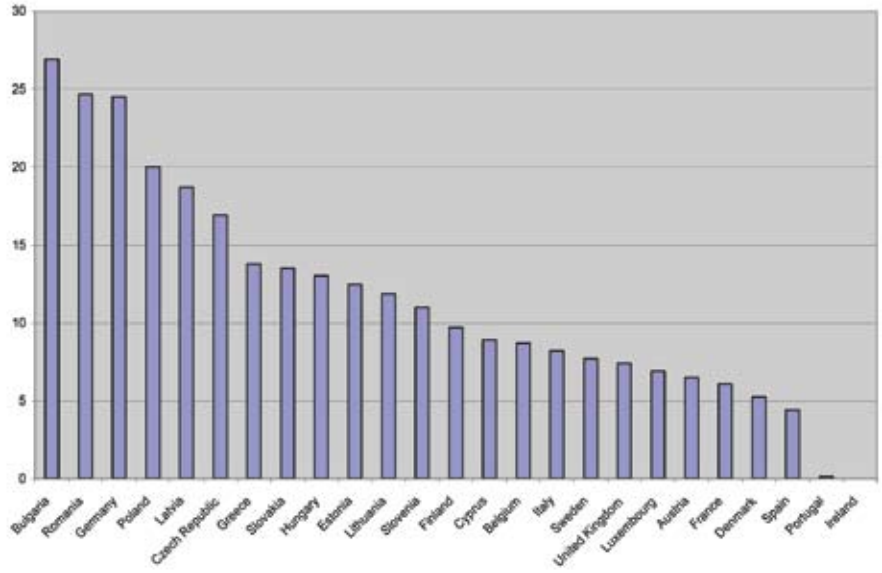


Source: Own editing ont he basis of http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

High spending on Axis 3 projects (employment diversification and improvement of rural living conditions) can be mostly observed in the new member states. More advanced countries generally have already solved this type of problems, while several new members still have to face this challenge. It is remarkable that there are 11 countries, where the share of resources, allocated to Axis 3. is lower than the minimum, prescribed by the European Commission (10%).

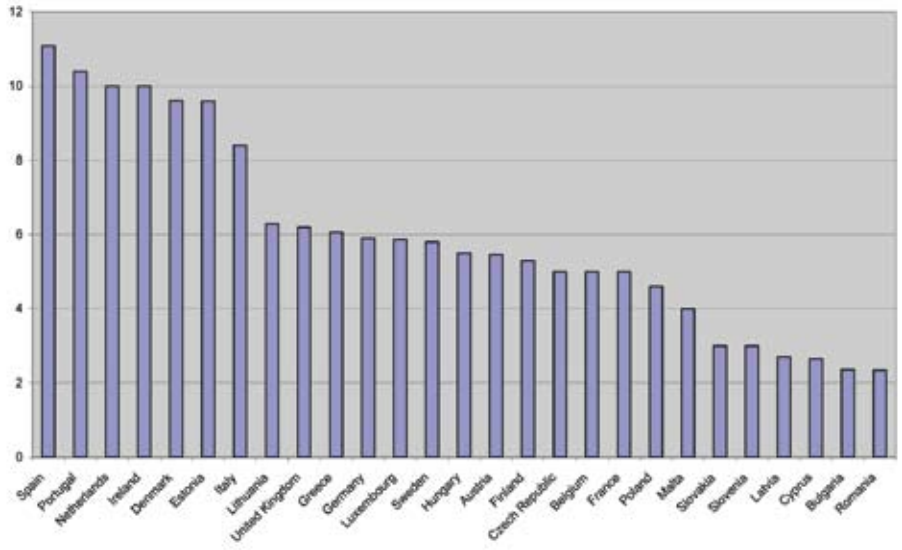
Finally, the fourth Axis is devoted to LEADER initiatives where the targets to be achieved are very broadly defined, and rather the way of organising the projects is in the focus of the project. The principal aim is to induce the representatives of the local society (local governments, farmers' organisations, NGOs and local entrepreneurs) to join forces in order to implement some local projects.

Figure 7. Proportion of axis 3 (The quality of life in rural areas and diversification of the rural economy) within EAFRD by country (%)



Source: Own editing ont he basis of http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

Figure 8. Proportion of axis 4 (LEADER approach) within EAFRD by country (%)



Source: own editing on the basis of http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

LEADER is a new phenomenon in most new member states. Therefore the European Commission did not insist upon to observe the 5 percent minimum allocation to this axis, new members can allocate less to this target. Only Hungary did not make use of this opportunity, because LEADER programmes started in this country as early as the year 2000 (at that time with domestic resources). There is an interesting relationship between the resources devoted to Axis 3. projects and those, devoted to the LEADER programme. Countries which allocated substantial resources to Axis 3 projects, spend less on the LEADER programme and vice versa. This relationship indicates that aims of the two programmes are by and large the same. The allocation depends on the way, how governments implement these targets. Are they relying to a larger extent on decentralised decision and implementation, or keep decisions rather in central competence?

Conclusions

1. Despite the fact that agriculture is one of the few „common" policies of the EU, the policies pursued in the individual member countries are very different. There are big differences even in the structure of EU supports received by individual countries. There are member states, where 90 % of subsidies belong to the 1st pillar of the CAP, and there are member states where 80-90 % of the support belongs to the 2nd pillar. It means that national policies matter.
2. Though CAP has a long term programme of seven years, most of national measures are of short term nature. The Commission would prefer increasing 2nd pillar programmes, while national governments prefer direct payments. The final shares are the result of compromises, where national governments frequently prevail.
3. In international comparison, Hungary has chosen in most cases the "golden" middle way. The agrarian government seems to follow a "wise" policy vis-à-vis the Commission. The big challenge is to make "wise" compromises also with the domestic producers.

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THE PLUM TOUR OF SZATMÁR - BEREG

ZSUZSANNA KASSAI-ANIKÓ GERGELY-ZOLTÁN SZABÓ

Introduction

The Northern Great Plain Region lies at the eastern border of our homeland, it consists of three counties (Szabolcs-Szatmár-Bereg, Hajdú-Bihar, Jász-Nagykun-Szolnok). The number of the nights spent in the region has continuously risen in the last few years. Now it is on the fifth place between the seven statistical regions. In 2007 the number of nights spent at commercial accommodations was 2055 thousands. The region stands in the fifth place on the basis of the number of visitors, preceding the Southern Great Plain and Northern Hungary. Altogether number of guests was 670 thousand in 2007, from which 76% was the proportion of the inland tourism. (HCSO, 2008; HUNGARIAN TOURISM CORP., 2008)

Figure 1. Arrivals by Region, Share 2007

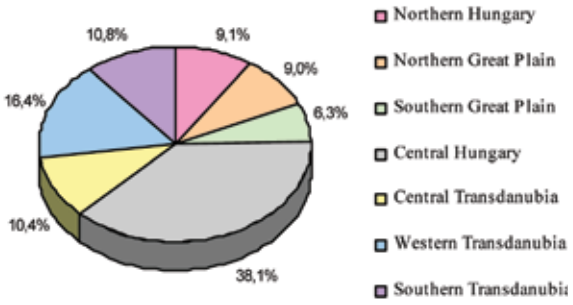
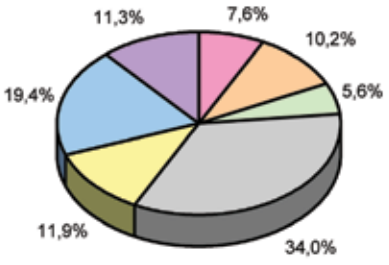


Figure 2. Guest Nights by Region, Share 2007



Source: own editing based on HCSO's data

The Northern Great Plain Region abounds in gastronomic values, the traditional local products are for example apple, honey, walnut, plum, plum brandy and horseradish. The region's characters lay a big emphasis on the popularization of these products. An opportunity is provided by the organization of thematic gastronomic tours (plum tour, horseradish tour) and the wide circle of programmes with a gastronomic topic for becoming the local characteristics known. (HUNGARIAN TOURISM CORP., 2006a)

The aim of our paper is to present the Plum Tour of Szatmár-Bereg inside the region, to analyze its situation from the viewpoint of rural development and marketing, to draw conclusions and to draft proposals concerning its development.

Material and method

After the overview of literature related to thematic tours, we studied TSTAR, 2006 statistical databases at the level of settlements and data of Hungarian Central Statistical Office. After these we followed the Plum Tour of Szatmár-Bereg settling down in the Northern Great Plain Region, where we prepared deep-interviews with some members of the creating and coordinating association of this thematic tour.

Definitions, characteristics, aims of thematic tours

The thematic tour is the connection of spectacles, tourism services and programmes, which can be found different sites being attached to a common topic, to a tourism product with a uniform representation. Its aim to join spectacles not meaning considerable attractiveness in themselves, hereby it grows the measure of common attractiveness. (HUNGARIAN TOURISM CORP., 2006b)

The establishment of a thematic tour increases the transparency of the given area significantly: on the basis of the structure suggested by the tour, the earlier unknown area turns into one which can clearly arranged, the visitors can recognize the attractions in thematic grouping, according to the depth or details of their own interest. Route proposals are bought usually with pleasure, because generally visitors' residential time is cut to short in an area. (RÁCZ-PUCKÓ, 2008a)

The primary viewpoint of creating thematic routes is marketing, to rise the interest in a given topic. The thematic tour marks the target group in many cases in its name already, at which the given topic was aimed. (TALABOS, 2002) The routes offer a knowledge acquisition and entertainment, recreation opportunity at the same time beside the respect of the principles of the sustainability. (PUCZKÓ-RÁTZ, 2000)

The thematic routes generally - from the viewpoint of marketing and management - are counted as an economic device, because they belong to the so-called without participating, self-driving visitor management techniques, so there is an opportunity for saving pecuniary resources. There is no need for maintaining separate constant staff because of the self-driving, the colleagues of the attractions forming the elements of the tour usually carry out the potential tasks. It is necessary to harmonize the function of the members of the route (for example publications giving information about the tour, the direction boards, the full marketing of the tour), coordinate the cooperation. As a disadvantage we can mention that the staff's shortage reduces the circle of the direct services. (RÁCZ-PUCZKÓ, 2008b)

The aims of these tours are to let an area be presented according a particular topic:

- its cultural traditions;
- its sights and its architectural traditions;

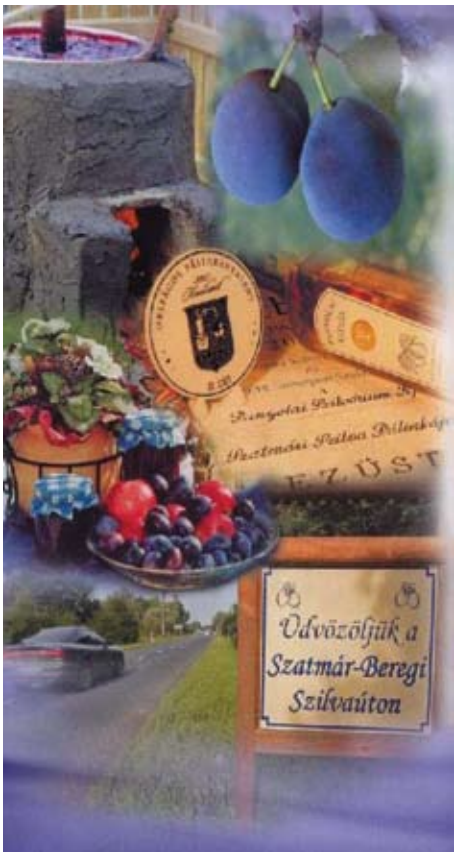
- the life of the past and present people living here;
- the devices used by the people earlier and currently.

Additional aims:

- the rising of interest;
- the reduction of an observed distance;
- the correction of cooperation between the settlements which do not cooperate anyway with each other;
- the offering education and entertainment at the same time;
- the opportunity of a new market's participation, considering mainly friends, relatives and the families;
- development (the establishment of tourism services nonexistent till now and the qualitative development of the existing ones);
- corresponding to trends (currently on the tourism market the thematic routes are trendy). (NAGY, 2008)

Introduction of the Plum Tour of Szatmár – Bereg

The aim of the Plum Tour of Szatmár – Bereg is the conservation of the gastronomic values, and presentation of the most characteristic fruit of the region and the products, food (dried plum, plum brandy, plum jam) that are made of it, and the activities in connection with the procession of these products (plum picking, desiccation, jam preparation, distillation of brandy, tasting, etc.). On the Plum Tour the tourist can get to know the growing and procession of the different type of plums can be only find at a few places at the present time, the different products made of plum and the natural and built-up attractiveness, and the gastronomic traditions of the region. The visitors are recommended two routes: the so called short Plum Tour from Penyige to Panyola, or the long Plum Tour from Namény to Namény, that includes the small Plum Tour as well. This lane contains the settlements Vásárosnamény, Tákos, Csaroda, Beregdaróc, Beregsurány, Tarpa, Tivadar, Penyige, Túristvándi, Szatmárcseke, Tiszacsécse, Milota, Sonkád, Kölcse, Panyola, Lónya.



Demographic characteristics of the region

In the region there are several unfavourable phenomena. The typical characteristic of the region is the natural decrease that means the death rate is higher than the birth rate, with the exception of Milota, where the natural increase was 5 per thousand in 2006. In the same year the highest natural decrease of the population was observed in Panyola and in Tiszacsécse (exceeded -20 per thousand).

The domestic migration balance was negative in some settlements, so the number of out-migrated people is higher than the number of in-migrated people, with the exception of Penyige, where the domestic migration balance was 8 per thousand in 2006. The population is continuously declining in some settlements, because the rate of population increase in all settlements is negative. In 2006, the highest population decrease was in Tiszacsécse (-75 per thousand) and the lowest was in Milota (-1 per thousand).

Table 1. Major demographic characteristics

Settlements	Birth rate (per thousand)	Death rate (per thousand)	Natural increase (per thousand)	Domestic migration balance (per thousand)	Population increase (per thousand)
Beregdaróc	20,03	21,28	-1,25	-7,51	-8,76
Beregsurány	13,8	13,8	0	-30,67	-30,67
Csaroda	20,54	26,86	-6,32	-9,48	-15,8
Kölcse	16,27	17,01	-0,74	-11,83	-12,57
Lónya	21,36	27,64	-6,28	-8,79	-15,08
Milota	8,31	3,56	4,75	-5,94	-1,19
Panyola	40,07	60,1	-20,03	-16,69	-36,73
Penyige	30,96	43,07	-12,11	8,08	-4,04
Sonkád	14,41	17,29	-2,88	-10,09	-12,97
Szatmárcseke	14,06	14,73	-0,67	-8,7	-9,37
Tákos	25,91	33,68	-7,77	-18,13	-25,91
Tarpa	23,12	29,01	-5,89	-9,07	-14,96
Tiszacsécse	45,64	66,39	-20,75	-53,94	-74,69
Tivadar	28,57	38,1	-9,52	-9,52	-19,05
Túristvándi	5,29	17,2	-11,9	-3,97	-15,87
Vásárosnamény	12,35	13,88	-1,53	-14,54	-16,07

Source: TSTAR, 2006

The current population of the area is ageing. The ageing index shows the ratio of the youngest and the oldest age-group, the value of the index is favourable when the youngest generation makes up the oldest ones. The situation is rather unfavourable in Csaroda, Lónya, Panyola and in Tarpa. In these settlements the number of ageing is extremely low, so the number

of aged exceed in number of children. On the other hand, Sonkád, Szatmárcseke, Panyola and Túristvándi are in favourable position, because the number of the people under 14 is higher than above 60.

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Table 2. Ageing index

Settlements	Ageing index
Beregdaróc	0,9
Beregsurány	1,0
Csaroda	0,7
Kölcse	1,0
Lónya	0,6
Milota	1,2
Panyola	0,5
Penyige	0,9
Sonkád	1,4
Szatmárcseke	1,2
Tákos	0,4
Tarpa	0,9
Tiszacsécse	0,9
Tivadar	0,9
Túristvándi	1,1
Vásárosnamény	1,0

Source: TSTAR, 2006

The number of the registered unemployed is high in many settlements in the region. Within the blue-collar workers the unemployment rate is higher than within the white-collar workers. Majority of the registered unemployed has low educational level. Mainly the unemployment rate is quite high among people who have primary school or trade school qualification, and the rate is lower within the graduates, because of this group's migration. Programmes, projects are needed which can lead to improve the quality of life in the interest of decreasing high death rate, increasing the educational level and employment. In this case the development of tourism can get a meaningful role (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

The beginning…

The idea of the making a region representative fruit tour after the examples of the French and the Western- European thematic tour, or the already well functioning Hungarian wine tours was composed by Dr. Hanusz Árpád

in June 2001. The plum is the essential, and the most determinating fruit of t he region that has been consumed in the form of dried fruit, jam and brandy for decades in the area. The purpose of creating the thematic tour is to strengthen the region's economy, and to introduce the fruit-growing traditions of the area.

At the early consultations relatively many local civilians came together, mayors, professional organizations, enterprises on the field of tourism, fruit processors, etc. Originally it was planned to found the association under the single name of Plum Tour, but this idea was reconsidered because of the positive advantages of using the geographical name. In the end The Plum Tour Association of Szatmár- Bereg was founded with 11 members in 2001, and the number of the members has become 25 since then.

The objectives of the association were the following:

- the exploration of the travel-offers of the area of Szatmár- Bereg,
- recording the places of interests, taking a survey about accommodations, and restaurants,
- organization of programmes,
- creating the tourism supply of the Plum Tour, and making it work continuously,
- and managing the communal marketing activity as well.

The infrastructural background of the association is provided by the Office of Local Government in Vásárosnamény, without it the association would be unable to function. One of the aims of the Plum Tour is to create jobs generation besides the protection of cultural gastronomy. The tax proceeds of the certain organizations are paid to the local governments, so they indirectly to contribute the reservation of the area. They indentify their competitors as the neighbouring thematic tours or tours with similar subjects.

Target Group

The target group of the tour is the native middle-aged families and group of friends. They categorize their products to the exclusive products of the premium level, that's why they don't target the average tourist, but the visitor, who likes to see the background of activities and processes.

Applications

The first 2-3 years was the time of vegetation in the lack of resources, and then in 2003. they won an application especially for the pecuniary assistance of the thematic lanes, and within the scope of this source they managed to finish the development plan and the strategy of the association. Through NCA applications they could finance 400.000-500.000 Ft of their functional expenses.

Owing to the professional councils of the NCA pecuniary assistance can be won for instructional trips, for cooperation of two civilian institutions, for

the exchange of the professional experiences. The association got in contact with enterprises of the Wine Tour of Sopron.

External relations:

- Cooperation with Kondra Brandy Association: a Romanian civil association and in frame of this the Romanians visited them to make a survey of what they can expect as Transylvanian distillers what kind of regulations they have to consider after accession to the EU. The subject of the discussion was the creation of the Plum Tour Szatmár-Szatmár, so the thematic tour would extend over the border.
- They also discussed about the extension with Ukrainian civil associations.

Marketing activity

The narrow resources set limits to the usage of different marketing tools. They can assign money for marketing that they win from applications.

Tools:

- A common logo is finished
- The association has two kinds of publications: an image publication and a service catalogue, which they can complete also from the sources of the applications. Beside these they also appear in different local publications.
- They have a common website, but this is out of date, not refreshed systematically.

Channels:

- The different prospectuses can be reached in the Tourinform offices.
- From the sources granted from the applications they can go to six regional exhibitions in the future. The money covers creating of displays and the participation fees, but not the trip, the accommodation and the personnel. Therefore they made an agreement with the Szilva Public Bath, so they will have a collective stand on the exhibition, they finance three-three exhibitions divided.

SWOT-Analysis

SWOT - Analysis gives an enumerative overview of the factors, which strengthen and weaken the area's tourism market share, which serve as opportunities or mean dangers.

Figure 3. SWOT–Analysis

Strengths	**Weaknesses**
• diverse natural conditions; • rich thermal water supply; • high-standard culture of vegetables and fruit-growing; • rich stock of wildlife; • gastronomic traditions; • traditionally good hospitality; (wayside inns, gastronomic specialities) • the diversity of environmental memories built up; • rich cultural choice; • premium products; • own face; • the fruit tour contributes to the widening of the region's palette; • cheap workforce; • the proximity of borders;	• in many cases low standard capacity of accommodation; • low-level cooperation with other tourism and hospitable service providers; • the frequent deficiency of tourism expertise; • the deficiency of language knowledge among the population and the service providers; • capital shortage; • undeveloped informational - communicational system; • deficiencies of marketing; • the deficiency of market research; • weak infrastructure; • backward traffic network, unfavorable achievement of the settlements ; • unskilled workforce; • migration of the qualified workforce • low income standard, high un-employment;
Opportunities	**Threats**
• the general growth potential of national tourism; • increasing interest in the thematic tours; • strengthening demand for the special products, the novelties, the beautiful natural environment, the eco-tourism; • the expansion of the EU sources aiming at the forming, development and operating of thematic tours; • expansion of motorways until the border; • the improvement of the marketing of tourism region; • union inside the region for drawing out the tourism season, harmonizing programmes; • the increase of solvent demand.	• the characteristic feature is the domination of the seasonality and the • price sensitivity in the tourism • the consolidation of capital shortage in the area; • the competitors' strengthening; ageing population, migration of the young persons; • the decrease of solvent demand; • the decline of inland tourism; • the decline of the conditions to get credit; • declining economic environment; • floods and river risk dangers on Tisza.

Source: own editing based on deep-interviews

Conclusions

The Northern Great Plain Region now is in the last place between the seven Hungarian statistical regions in terms of GDP per capita. In the area the level of incomes, the proportion of foreign capital and the activity of entrepreneur are lower than the average. The death rate and the level of unemployment are high and the black market is powerful. The human resource side of the tourist services is, for example the knowledge of foreign languages and the professional skills to be developed as well as regional marketing needs to be improved. Development of the tourism considered as an active instrument of rural development, an important factor in increasing the competitiveness of the area.

The strategy of the regional tourism development (2007-2013) mainly focuses the development of tourist attractions, expansion of the programmes (for example gastronomic and cultural thematic tours), working up quality accommodations and it urges the improvement of the activity of tourism marketing. Currently the work-out and the development of the so-called thematic tours can be tendered (within the scope of the 3rd axis of New Hungary Rural Development). A part of the standpoints that were composed in the development plan of the Plum Tour has been accomplished, but additional changes must be paid attention to. The administrative concerns, the marketing activity of the association is carried out by one single man. It's necessary to employ more qualified workforce and to improve the management.

On the field of communal marketing intermittent development is needed. First of all the fact is needed to be accepted with the members that collectively they can obtain greater successes and their own marketing cost can be reduced. The base of thematic tours is common marketing. Suppliers appear together in the market and as a result, thematic tours become independent and homogenous products. But market research has to get ahead of the development, because in the region the surveys are not prepared about the reputation, the satisfaction and the attendance. On the field of the instrument development the continuous webpage refreshment and widening of available information (online reservation, call for orders, etc.) would be important. As well as the human side of tourist services requires the development (knowledge of language, professional preparedness).

The association is not homogenous as usual the wine-tours. From plum, several products can be made (jam, fruit-brandy, dried plum), for this reason to set up general quality standard is rather hard. In the future would be preferable to take over a well working wine-tour's standards. The programmes should be synchronized with the other programmes in the region, so the season can be prolonged.

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DIFFERENT REGIONS–REGIONAL DIFFERENCES IN THE VISEGRAD FOUR COUNTRIES

DÁNIEL KUTTOR

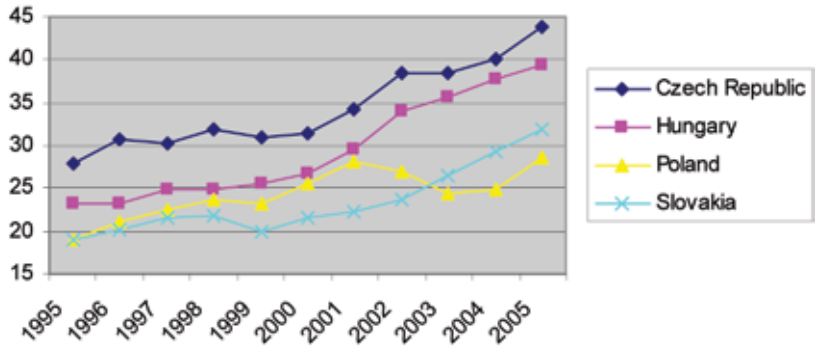
Introduction

The V4 countries form a unique cluster within the European Union (EU), which show many similarities from historical, political, economic and social respects. These countries however are not only members of the EU, but also parts of a methodological group of World Economy, which is called "Transitional Economies". The Transitional Economies can be divided into subgroups as follows (SVEJNAR 2001):

- Central and Eastern European (CEE) states: V4, members of the former Yugoslavia states, Albania, Bulgaria and Romania;
- Commonwealth of Independent States (partly the former Soviet Union's states);
- Baltic States: Estonia, Latvia, Lithuania.

After the serious economic, political collapse of the late eighties, early nineties the Central and Eastern European countries started to converge to Western Europe from many viewpoints since 1994-96. The former members of the so-called Eastern Block successfully approached their standards of living (i.e. Gross Domestic Products per capita values <GDP pc>) to the developed European standards.

Figure 1. GDP pc values of selected countries in percentage of the EU average



Source: own editing based on data by EUROSTAT.

Table 1. Growing gap comparison of GDP pc

	GDP per capita (1990 Geary-Khamis dollar)		
	Western Europe	Eastern Europe	Ratio
1950	4579	2111	46,10%
1960	6896	3070	44,52%
1970	10195	4315	42,32%
1980	13197	5786	43,84%
1990	15966	5450	34,14%
1995	16860	4998	29,64%

Source: own editing based on data by Angus Maddison.

This positive process has not been typical of these countries long ago, as they lagged behind during the 20th Century. The gap between the Western and the Eastern parts of the continent increased although with changing intensity but continuously since the beginning of 1900.

Obviously it can be stated that the CEE states' position was significantly improved in the recent years. However what were the tendencies on regional, mezzo level like? Were the disparities increased; or decreased? Did every region equally benefit from this growth? Which regions performed better and worse?

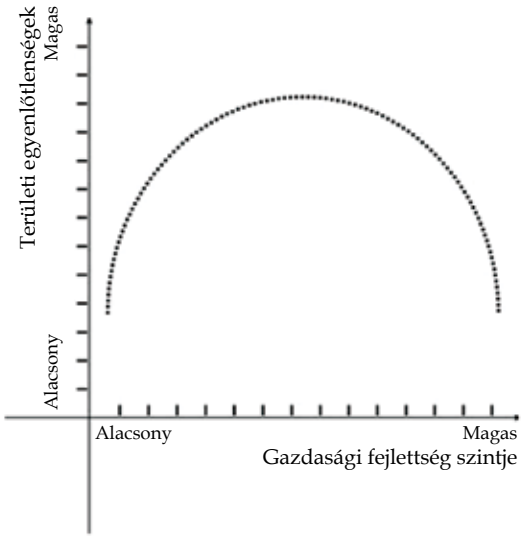
Theoretical background

The analysis of spatial distribution of production factors, economic activities and income has long run traditions compared to other sub-disciplines of the economics. First Von Thünen, Weber, Christaller, Lösch, Isard and Henderson have dealt with the location of production. The "New Economic Geography" from Krugman can be considered as the starting point of a new period describing the factors and their effects on the regional dispersion of economies (KRUGMAN 2003).

During the decades contradictory opinions, approaches have been developed regarding the relation between regional development and disparities. On one hand according Solow and neoclassic economists the regional differences disappear with the growth because of the diminishing returns to capital. On the other hand by Myrdal and the post-Keynesian theory the growth is a spatially cumulative process, which results increasing inequalities (BRADLEY, PETRAKOS, TRAISTARU 2005).

The interdependence between growth and disparities have been analysed in its complexity by others. Williamson has stated that the degree of spatial inequalities depends on the level of development of the selected territory. At the two extreme points i.e. low and high level of development the regional differences show less extent, nevertheless during the transition period tend to increase. Therefore it can be characterized as a reversed U.

Figure 2. Relation between level of economic development(X) and territorial disparities (Y) by Williamson



Source: own editing.

The representatives of the so called "trade off" phenomenon say that convergence on national level may result divergence, i.e. growing disparities on sub-national, regional level (NOVÁK-PAPDI 2007).

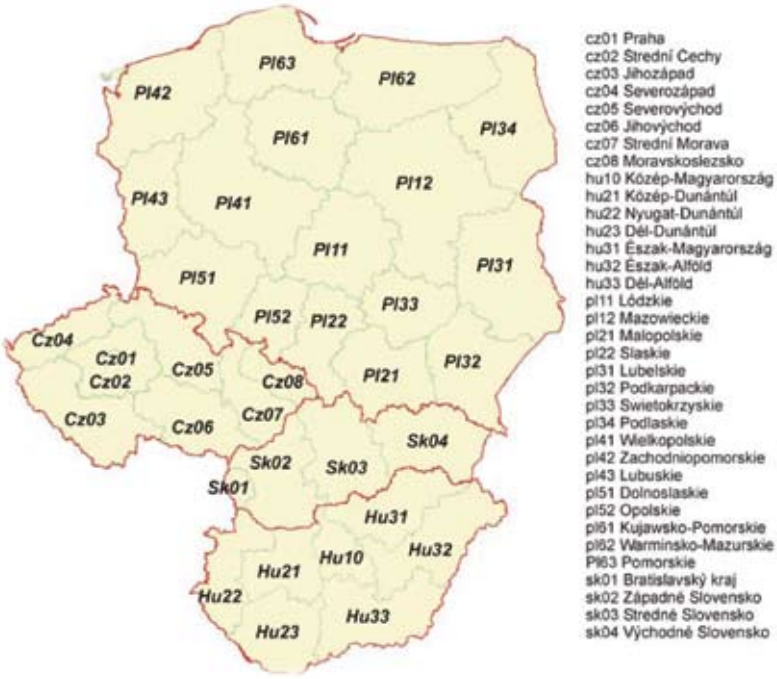
Analysis of regional inequalities

First of all the geographical limits of the examination have to be defined in order to determine the units of number. As it was mentioned before the analysis comprises the V4 states. According to the EU Nomenclature of Territorial Units for Statistics (NUTS) there are 35 territorial units on the NUTS 2 level. The distribution of the regions is shown in the following figure.

Evaluation of regional performances

After limiting the regions involved in the research I investigate the regional inequalities using the Gross Domestic Product (GDP) per capita indicator. In spite of the total GDP (at current market prices) shows the economic weight or importance of the regions, the GDP per capita (GDP pc) figure (either at current market prices or in PPP) indicates the level of development concerning the selected units.

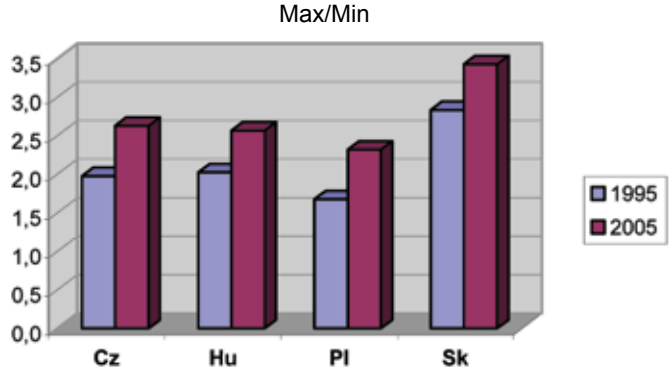
Figure 3. Location of V4 regions (NUTS 2)



Source: own editing based on NUTS database.

Generally the regional disparities are among the highest in the CEE countries within the EU (Szörfi 2007). Four of the five countries with the highest value are from the group of transition economies, like Slovakia, Czech Republic, Romania and Hungary (Belgium is the only one as old member state). Poland represents the exception since its lower value ranks the country in the middle of the line.

Figure 4. Regional disparities in the V4 countries (ratio of GDP pc)



Source: own editing based on data by EUROSTAT.

The above figure shows not only the ratio of regions with the maximum and minimum GDP pc (MAX/MIN) but the change in time by countries. The columns proves the previous statement, i.e. the difference is the highest in Slovakia and the lowest in Poland, the Czech Republic and Hungary have approximately the same position. As regards the temporal change in Poland increased the disparity most of all (followed by CZ and HU) and in Slovakia the least. If the capital (the most advance) regions are extracted from the analysis the differences decrease significantly; the values drop down to the half and the extent of change from 1995 to 2005 is much less as well.

Using the GDP pc figures of the regions I have calculated some statistics with the assistance of the SPSS software.

Table 2. Descriptive statistics of the regions by year

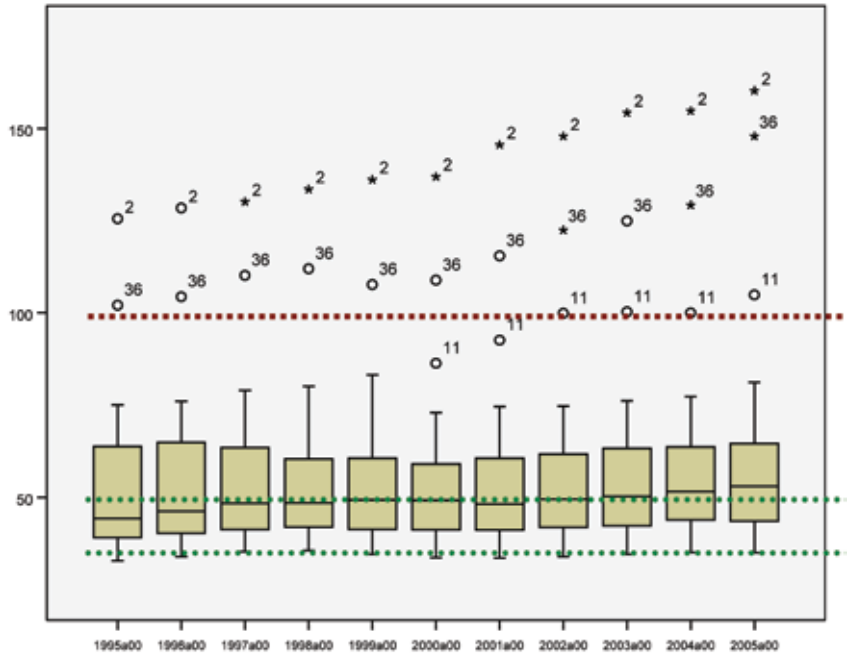
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
		a00	a00	a00	a00	a00	a00	a00	a00	a00	a00	a00
N	Valid	35	35	35	35	35	35	35	35	35	35	35
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		51,549	51,549	52,76	53,443	53,64	53,546	53,406	54,166	55,203	56,689	58,003
Std. Error of Mean		3,394	3,394	3,495	3,493	3,523	3,566	3,610	3,922	4,084	4,247	4,265
Median		43,7	43,7	44,9	47	47,5	48,6	48,1	47,4	48,3	48,2	49,5
Mode		39,1(a)	39,1	41,5	35,6	36,7	42,8	36,4	36,2	64,2	34,6	45,3
Std. Deviation		20,078	20,078	20,677	20,662	20,841	21,098	21,356	23,202	24,164	25,125	25,233
Variance		403,121	403,121	427,548	426,934	434,361	445,135	456,097	538,339	583,899	631,259	636,719
Range		92,8	92,8	94,6	94,9	98	101,6	103,3	112	114	119,7	119,7
Minimum		32,8	32,8	33,9	35,3	35,6	34,6	33,7	33,6	33,9	34,6	35,1
Maximum		125,6	125,6	128,5	130,2	133,6	136,2	137	145,6	147,9	154,3	154,8
Sum		1804,2	1804,2	1846,6	1870,5	1877,4	1874,1	1869,2	1895,8	1932,1	1984,1	2030,1

Source: own calculation with SPSS. a Multiple modes exist. The smallest value is shown

The Variance and the Standard Deviation figures show continuous growing trend, especially in the recent years of the analysed period, when the V4 countries performed a higher economic growth. The Boxplot graph (Figure 5) is the visualized version of the values in the above table. During the interval the gap among the best and the worst performing regions increased significantly. This fact can be explained with the followings:

- the previously selected 'capital regions' (with number 2-Praha, 11-Budapest, 36-Bratislava) developed much faster than the rest (the growth rates will be shown later);
- the situation of the least developed regions remained unchanged during the period;
- additionally the mean hardly changed.

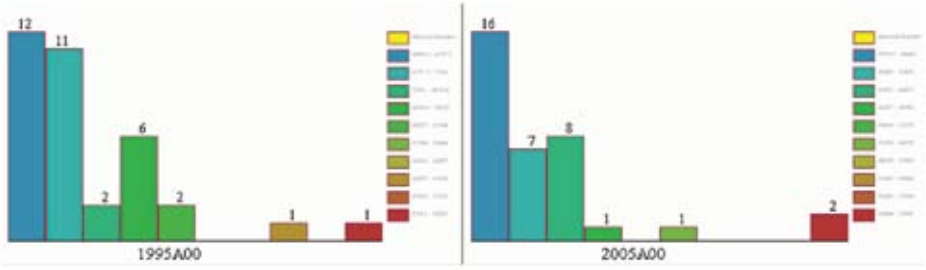
Figure 5. Boxplot graph of the regions by GDP pc in % of the EU average



Source: own editing based on data by EUROSTAT.

The meaningful polarization can be seen when we group the regions as well. Creating ten equal-size classes between the maximum and minimum values the distribution of the units is the following (Figure 6 a and b). From 1995 to 2005 the bottom classes' number increased and the repartition of region became more disadvantageous, i.e. more regions got to worse position. Contrast with this just a few regions could make improvements.

Figures 6. a, b. Distribution of regions by GDP pc in % of the EU average

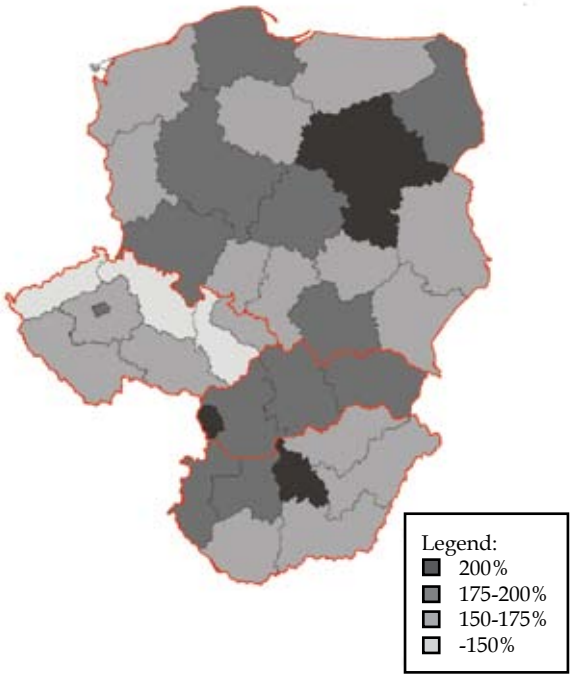


Source: own editing based on data by EUROSTAT (with GEODA).

The different regional growth rates caused growing polarization. What are however the extent of the rates exactly? Where are the fastest and slowest regions located? In this case the GDP pc (in PPP) is analysed; the basis year is 1995 and the change to 2005 is measured. The fastest regions could double their figures; the slowest just added one-third of their original values. The capital regions are ahead according the volume of growth. Mazowieckie (Warsaw's region) was the most rapid, followed by Bratislavský kraj (Bratislava's region) and Közép-Magyarország (Budapest's region). The five slowest regions are Czech without exception. On one hand Slovakia shows the most balanced growth rates among regions; on the other hand Czech Republic makes the most extreme. In parallel with this significant territorial polarization went on in Hungary and Poland as well.

According to the growth rate four groups of regions have been generated. The geographical distribution of the regions is shown on the next thematic map.

Figure 7. Different growth dynamic: GDP pc growth, % (2005/1995)



Source: own editing based on data by EUROSTAT (with MAPINFO).

In order to understand the higher and lower growth potentials it is essential to group the regions and investigate the performance of each cluster. Two attributes of regions are used to carry out this work phase. They are as follows: the population density (urban vs rural profile) and the economic profile (agriculture vs industry vs service oriented).

In the first case the population density figures are measured and four categories are created:

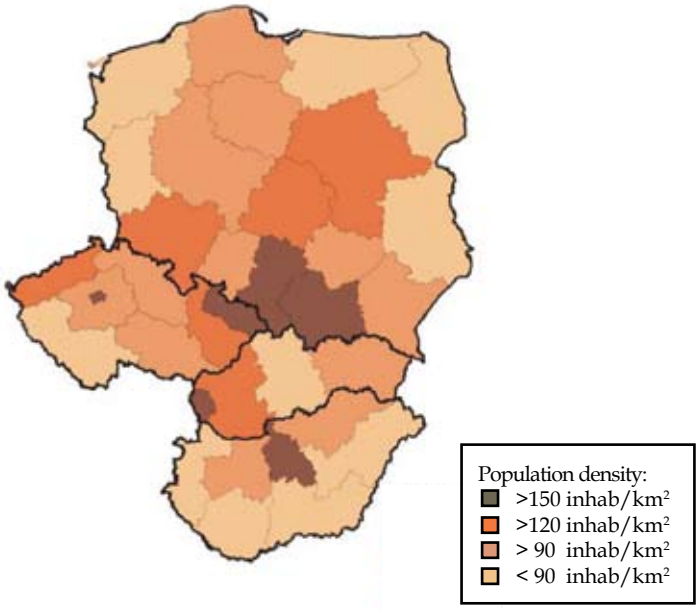
- *rural:* less than 90 inhabitants per square kilometre;
- *intermediate 1:* between 90 and 120 inhabitants per square kilometre;
- *intermediate 2:* between 120 and 150 inhabitants per square kilometre;
- *urban:* more than 150 inhabitants per square kilometre.

In the second case the distribution of economically active population by sectors are measured which results three categories:

- *dominant primary sector* if the rate (of economic active population) of agriculture is higher than 10 percent;
- *dominant secondary sector* if the rate (of economic active population) of industry is higher than 25 percent;
- *dominant tertiary sector* if the rate (of economic active population) of services is higher that 60 percent.

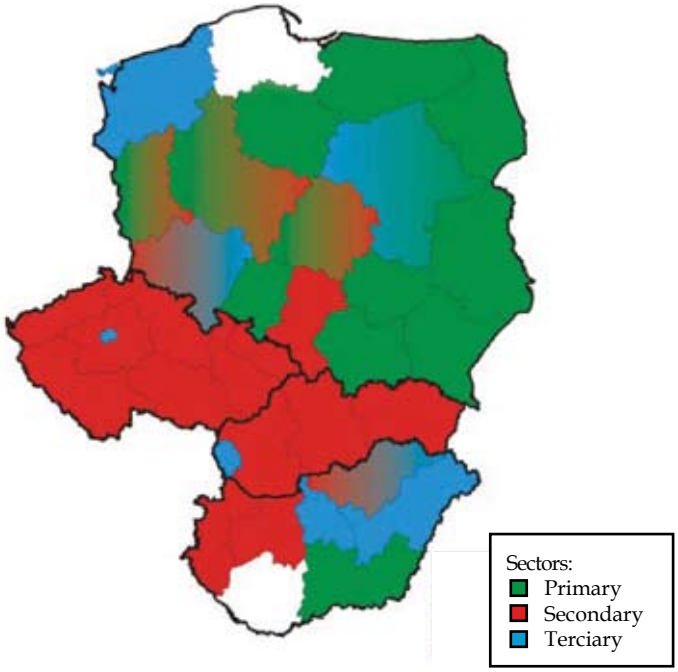
The location of the members of each group is shown on the next two thematic maps. From the respect of the population density the core regions and Moravia (CZ-PL) and Silesia (PL) are showing denser population distribution. On the opposite side the rural areas with low concentration of population in Hungary and Poland are located. As regards the sectorial division the core regions are dominated by the tertiary sector. The rest regions of the Czech and Slovak Republic belong to the industrial group. Hungary and Poland are showing a more mixed picture possessing different types of regions. The agro-regions are located in these countries as well.

Figure 8. Regional differences by population density



Source: own editing based on data by EUROSTAT (with MAPINFO).

Figure 9. Regional differences by sectors



Source: own editing based on data by EUROSTAT (with MAPINFO).

Now let us compare the performances of each group. Based on the results which are displayed in Table 3 it can be stated the regions with highly concentrated population developed faster than the sparsely populated during the interval 1995-2005. The urban areas performed ca. one and half times higher growth than the rural. The two intermediate groups achieved almost the same level of increase.

Taking into account the GDP pc capita figures in percent of EU average the degree of convergence is demonstrated. Just the urban regions could converge significantly; almost reaching the EU average at the end of period. In spite of this the intermediate and rural regions have shown less grade of convergence.

Table 3. Regional differences by population density

	Annual percentage change of GDP, %	GDP per capita in % of EU average (PPS, 1995)	GDP per capita in % of EU average (PPS, 2005)
Pop density > 150 inhab/sqkm	4,25	75,92	96,23
Pop density > 150 inhab/sqkm	3,48	53,03	59,85
Pop density > 90 inhab/sqkm	3,57	46,45	51,28
Pop density < 90 inhab/sqkm	3,01	43,01	46,85

Source: own editing based on data by EUROSTAT.

Analysing the relation between the economic structure and the growth of the regions significant difference are found as well. In this case the regions driven by the tertiary sector lead before the areas which have major secondary and primary sectors. Consequently the position compared to the EU average of the tertiary group has improved in largest degree. The exact figures of calculation are in the following table.

Table 4. Regional differences by sectors

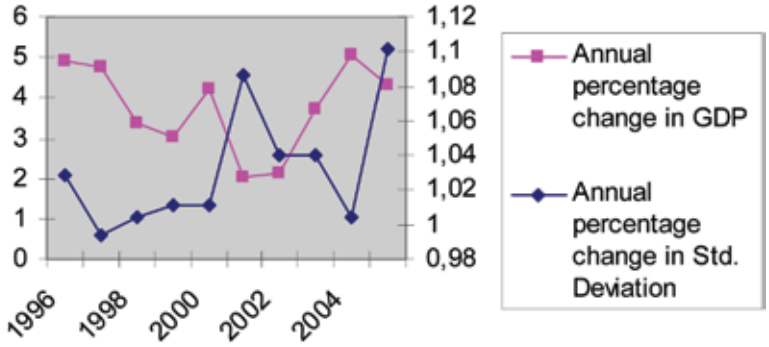
	Annual percentage change of GDP, %	GDP per capita in % of EU average (PPS, 1995)	GDP per capita in % of EU average (PPS, 2005)
Primary sector	3,17	39,41	45,35
Secondary sector	3,6	52,51	57,18
Tertiary sector	4,09	65,28	84,76

Source: own editing based on data by EUROSTAT.

In the theoretical part of this paper among others the "trade off" phenomenon has been described. By observing and measuring the growth rates a question may be asked if there is interaction between the change of growth rate and the disparities especially in the V4 countries. For proving the existence of "trade off" the changes in rates have to be visualized.

In the past years the two lines although shifted in time but described a more or less similar paths. First the change in GDP jumped (in 2000 and 2004) which was followed by growth in change of Std. Deviation. Consequently the higher GDP growth results higher rate of change in disparities.

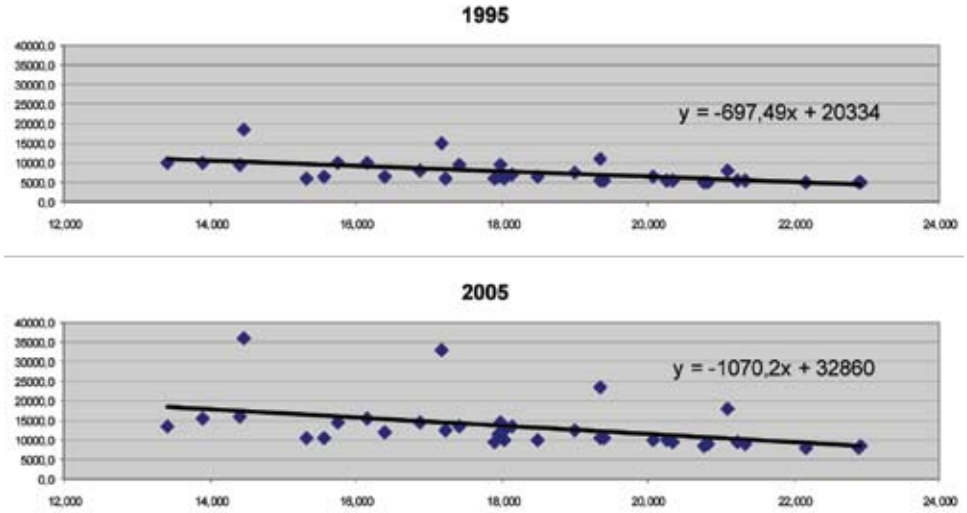
Figure 10. Annual percentage change of GDP pc and Standard Deviation



Source: own editing based on data by EUROSTAT.

Finally I intend to introduce the geographical aspect of the changes. It is a well known thesis that the further a region is located from the core area of Europe the less advance it is. Accordingly the level of development continuously decreases from west to east, which describes a west-east incline. How has the scale of this incline modified in the past years? The answer can be given if the GDP pc figures are put into the system of coordinates by geographical location (on axis X).

Figure 11. a, b. Distribution of regions by geographical location



Source: own editing based on data by EUROSTAT.

The growing inequality is obvious; i.e. the western regions could converge better than the eastern. The equation of the function can prove the increasing differences as well.

Conclusion

In the chapter I summarize the statements and lessons learnt from the results, outcomes of the analyses:

- the V4 countries could converge to Western European (EU) average measured on national level;
- at the same time the territorial disparities on regional level increased dramatically;
- the polarization in every country means that the capital region has significantly higher growth potential and a faster convergence, some reasons for this phenomenon:
  - these regions are centres for a politically, economical strongly centralized states;
  - many companies selected hq or location within this regions;
  - they have huge market and relatively high income per capita figures;
  - service sector plays outstanding role in their economies;
  - they have well qualified human resource;
  - there are a number of trade and logistics centres in the regions.
- in contrast with the previous there are regions which although increased their GDP, but the GDP per capita values did not get closer the EU average;
- in many cases the national convergences were due to just the growing capital regions;
- the urban areas and the regions with dominant tertiary sector showed higher growth rates and real convergence to the EU average; the rural and agro- or industrial regions performed weaker;
- the „trade off" phenomenon can be observed in CEE countries which states that increase in the GDP growth resulted increase in the change of Std. Deviation;
- the geographical location of the regions determines the chance for growth, i.e. the western regions grew faster during the period 1995-2005, than the eastern.

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CLUSTERS IN ECONOMIC DEVELOPMENT AND IN GOVERNMENTAL POLITICS

AMARILLA LUKÁCS

Introduction

Networks and clusters, which are increasingly more popular nowadays, are not simply buzzwords. They are successful answers for the challenges of the globalization which induced the abrogation of frontiers, enhanced the business commitment for competition, the continuous innovational compulsion and the effort to appear on the international markets. The governments and the various regional local governments welcome the networks' and the clusters' formation always, since an opportunity is made for the realisation of their economic policy. It was noticed that it is possible to serve regional development, economic activity and other aims with their help, included acclimatization of innovative, industrial sections growing quickly the region's advancement. It was realized that networks and clusters help to connect the small and medium-sized enterprises to the capital current of the economy.

Clusters create the opportunity for smaller undertakings to take a share in the market dominated by the multinational companies, without they give up their autonomy. The multinational companies favour the formation of the clusters and its function since they realized that the potential suppliers' camp may be organized by the way of them. Universities and searching places do not play a little role in the formation of clusters and their function just as research and developmental activities of firms. This is the manner of organization in which the profit-oriented undertaking can work together harmonically with the non-profit institutions and other actors of economy. This kind of cooperation is exceptionally beneficial for each member, because they can get a contact in such a way with each other that their own character does not get injured.

It's difficult to summarize the essential aspects of clusters with one single definition therefor I can not give one definition which is accepted by everybody. Cluster concepts (spatial curdling, grouping, curly etc.) summarize all different forms of economic activities' spatial concentration, and the most many-sided phrasing which I have read says, that the independent economic players in clusters take care of tight cooperation relations competing with each other simultaneously, getting organized in a single industrial branch along a value chain system, where non-profit institutions and other organisations are concentrated regionally and these networks contribute to the development of it participants, and of the whole region, while the area's competitiveness increases. (GROSZ, 2002)

Hungary had to go through big changes at the beginning of the 1990 years, since it had to transform the construction of its economy and

its technology, and had to adapt to the globalization processes. The main problems were the dependence on traditional industrial and agricultural construction, the low level of direct foreign capital, the regional differences which grew steadily, the educational problems of skillful labour force, the deficiency of Hungarian small- and medium-size enterprises' competitiveness in the international comparison, the social capital and the infrastructural background which are existing problems nowadays and factors consisting in the road of economic development. The companies in Hungary can only compete with developing countries' lower wages, if they can reduce the expenses to a minimum level, or they spend more money for research and development, onto product differentiation, and if they collaborate with other companies and institutions organically. The network-building and the clusterization strengthen the inner cohesion fundamentally and increase the competitiveness therefor it is necessary to favour an initiation concerning all cluster foundations in our country. A lot of foreign examples are at Hungary's command to the organization and realization.

The West Pannon Regional Development Council played a big role in the creation of first Hungarian clusters, because it announced in 2000 that it develops the organization of clusters. To this process contributed the fact that the organisations of economic development established their cooperation network, Pannon Business Initiative beside the industrial branch groupings on 16th October 2000. PBI's, the economic development's non-profit network cooperation's aim was formation of an attractive, innovative economic environment included the enhancement of inner economic cohesion of the region, the innovational ability and the erection of an organizational system which are necessary to the recruitment of networks. In this initiation's framework came into existence the first Hungarian industrial cluster, the Pannon Automotive Cluster took shape on the end of the year 2000 (PANAC), then successively Pannon Tree and Furniture Cluster (PANFA) and Pannon Thermal Cluster (PANTERM). Cluster-building was particularly in the West Transdanubian region considerable, because the area is abounding in industrial parks, innovational centres, chambers, undertaking development foundations and investing-motivating organisations.

PBI didn't only constitute one part of the Hungarian national economy, but Győr functions as a gate to Austria and Slovakia, Szombathely and Zalaegerszeg to Graz and Ljubljana, Nagykanizsa towards Croatia, giving an opportunity to the networks' and international contacts' additional extension. The initiation created the framework of the West Transdanubian network-based economic development helped the region with the execution of its economic development programs, and enable the entrepreneurial circle to have a share in the region's economic dynamism and broaden the network cooperation involved small- and medium-size enterprises. The cluster development was supported with union sources in the framework of GVOP already in 2006, but a lot of applications were invited for the gainings of 1100 billion forint supports for the innovative clusters producing success acknowledged by the market in the present programming period from

2007 till 2013. The clusters can compete for sources in 4 categories in the frameworks of GOP, ROP and KMOP which are the following:

- leaving clusters
- qualified clusters
- accredited clusters
- pole innovation clusters.

According to the plans in the first two phases clusters receive supports from the Regional Operativ Programs, while the serious cooperations presenting, accredited and pole innovational clusters are supported from the Economic Development Operativ Program. For leaving and qualified clusters are 4-8 billion and 6-20 billion forints available to stand for taking actions, the accredited clusters and pole innovation clusters may submit a tender on GOP publications though altogether 15-30, concerned onto 20-40 billion forints. In the ROP – beside 80 percentile support intensities - the West Transdanubian clusters can apply for approximately 800 million forints, and the winners' number may be around fifteen according to the plans. Aims of the publication appeared in the second quarter of 2008 were the promotion of networks' and cooperation's extension, the finance of R&D activities, and the expansion of clusters' competitiveness. (Vas Népe, 2008) I summarized the competition opportunities of clusters with the help of a table.

Table 1. Competition opportunities of clusters

	Leaving clusters	**Qualified clusters**	**Accredited clusters**	**Pole innovation clusters**
Competence	ROP	ROP	GOP	GOP
Amount	15-50 million Ft	50-200 million Ft	300 -1 500 million Ft	1 500 - 4 000 million Ft
Money for 7 years	4-8 billion Ft	6-20 billion Ft	15-30 billion Ft	20-40 billion Ft
Supported	150 -200 pieces	50-100 pieces	25-50 pieces	5-15 pieces

Source: (based on Pólus Klaszter Kézikönyv, 2008) own editing

Cluster policy in Hungary

A lot of important factors make a cluster successful include: the availability of venture capital, critical mass, technical infrastructure, presence of higher education and research institutions, entrepreneurial drive, influence of champions, presence of an anchor firm(s), networks and quality of linkages, social capital and diversity. An intriguing aspect is that the factors that distinguish „over achieving" from „under achieving" clusters are so-called intangible assets. Clusters possessing strong inter-firm relationships, trust and social capital are more competitive and dynamic. (WORKING PAPERS, 2003)

The largest problem in Hungary is that the majority of clusters are not created as an underhand initiation with the creation of cooperation between small and medium-size enterprises, but in the interest of the domestic and union sources, with a governmental intervention. The artificially created clusters can not be successful, because it is essential, that clusters are based on local resources, recognizing concealed synergistic effects in the cooperation, and they are built from the commitment for common aims let the networks and the development of clusters come true.

It is very important to mention the fact that a cluster should be able to maintain itself on a long distance, if it is capable to provide (for the members valuable) services, for that the members pay fees. The majority of clusters is not capable of this currently. The sources of clusters consist of 4 parts mostly: from the central government received supports, on the regional level allotted (union) supports, the sources on a county level (what are got from the local governments) and from fees which cluster members pay in. At the time of clusters' formation and development it is necessary to be before an eye, that merely because it is possible to call up the union sources and it is necessary to make use of them, may not be to create clusters. For the successful function of a cluster it is important to formulate some golden rules. (LENGYEL-GROSZ, 2003):

1. Clusters can be strengthened in case of an economic policy with a cluster basis only, when the decision making is decentralized. The essence of cluster-based regional development strategy is that only cluster-specific developments have to be realized, which confirm the competitive advantages of the region's clusters, because the competitive advantages can be supported only on a regional level.
2. It is not possible to force the formation of clusters. The support of regional clusters is permissible only in the existing or initial phase. To the development of clusters the undertakings have to take the first steps after benefits of cooperation were recognized, and the contacts are inclined to its development. In market economy before the development of clusters only the realization of business interests (the organization of lectures, courses, vocational programs stb.), and commissions' formation can be supported, that may help for the undertakings to be inclined to the cooperation. When the cooperation took shape and the enterprise networks came into existence (that is moulded the embryonic clusters), in the following step it is possible that governmental institutions or development agencies help to support, and to speed up the strengthening of clusters. It's most important devices are: the support of cooperations and networks, and the development of local institutional network being based on the undertakings' needs and services.
3. It is not allowed to restrict the market competition in the interest of single industrial branches and groups of companies in the central governmental politics. Favouring the direct industrial support and undertaking, and the direct market intervention has to be replaced by indirect assistance.

4. It is not allowed to lay the emphasis only on the clusters working well and existing already. It is necessary to support and to motivate the smaller clusters which need care.
5. It is forbidden to regard clusters as final goals which are wanted to realize, because clusters can be only tools in the hands of governments.
6. The politics must not pledge himself to one single company or a cluster on a long distance.
7. It is prohibited the sources uncoordinatedly, not focused to use.
8. It is essential, that the local conditions are revealed, because the necessary developments are able to be formulated on a local level only. This demands a strong decentralisation anyway. The regional or local level's role is unequivocally the support of formation of lasting competitive advantages and the formation of suitable business environment.

Several devices stand for the provision of governmental politics to the support of clusters, but the indirect tools may drive only onto a result from among these.

There are some factors, which stand in the way of clusters' efficiency and which hamper the successfulness of cluster-oriented development politics. The majority of these springs from the macroeconomy, so the government is not able to eliminate these, it can only make an attempt at the reduction of their distorting effect merely.

Table 2. Tools in governancial cluster development

Direct tools	Indirect tools
development of a vehicular and communicational infrastructure	contacting with the public institutions and the universities
environment protection	tax reliefs
organization of education and trainings	tax cut for R&D expenses
support of supplier systems	promotion of international contacts
stimulation of innovational processes	supporting the cluster's functional expenses
support of a common marketing and export	

Source: (based on LENGYEL-DEÁK, 2002) own editing

The factors hindering the cluster building and development, which may lead to serious problems, are observable on Hungary. These can be summarized on Rosenfeld's (2002) basis:

1. One of the largest troubles is the existence of the deficiencies appearing in the physical infrastructures, since the vehicular and communicational infrastructure and the suitable logistics are indispensable to the development of typical tight cooperation relations and clusters'

development. There is need anyway in our homeland because of this onto the corrective developments insuring the availability to the successful processes.

2. The deficiency appearing in capital goods standing for taking action for the companies may lead to serious problems. One of the vital elements of clusters is the realisation of continuous renewal skills, innovative ideas and active research-developmental activities, which are accompanied by a capital requirement, since the traditional bank credit is incapable of the treatment of risk. The insurance of special capital goods' availability (pre-seed capital, seed-capital, business angels etc.) is very important anyway because of this.
3. The deficiency of the expertise may limit the cluster process. This phenomenon can be leaded back to the fact that the education and the training do not become specialized in the area in this manner to manufacture special expertise. It is feature, that the international (mainly foreigner) undertakings are not confident about the local labour market, the workforce is imported rather, therefor the opportunity of local workforce is much smaller in this manner onto the experiencing.
4. There are dangers residing in the regional isolation. These come forward if there is an area relatively distant of the world's driving areas, and it does not have a competitive undertaking with wide-ranging international contacts, through which there would be an opportunity onto the contacting and apart from the cluster onto obtaining informations. This information circulating inside the cluster and the exchange of experiences are not enough in that case to the maintenance of competitiveness. This can be experienced in the plain regions.
5. The confidence, which is missing from the entrepreneurial culture in our homeland, is so important for the cooperation. This means one of the most considerable problems to the success of clusters. Because of this the persuasion, the development of readiness to the cooperation, and the deepening of confidence play an especially important role.

We can see that the cluster-oriented development doesn't have its conditions in Hungary but we may improve the present adverse situation with the suitable use of union sources. The foreign countries' experiences can help us in the starting of changes.

The foreign experiences of cluster-oriented development policies

The cluster training comes true as a process setting out from the small and medium-size enterprises' circle in Western Europe, and the cluster development appears as an important element of the governmental politics. European countries and regions have launched a wide range of cluster initiatives. Some of them have started clusters policies long ago - Catalonia and the Basque Country in Spain, Veneto in Italy, Scotland in the UK, Denmark, the Netherlands - while others have started within the last few

years - a number of Austrian regions, the Czech Republic, the UK, Sweden - or have further developed them through national initiatives - France, Germany. In the sheer number of cluster policies and programmes, Europe is now among the most active regions in the world economy.

The cluster-oriented development politics may be realized on two levels. The most important decisions are born on a regional level for example in Austria or in Germany, but the cluster politics appears on the national level in the other countries. It's typical for the firms working in a cluster yet, that their profitability improved with 2-4%, and the companies' survival proportion was much taller, than in other separated firms. The cooperation assures advantages to the partners attending in clusters, so it is better for everybody, as if they would try to be in competition separately. The key companies, on which the cluster is built and exporting apart from a region, show a big increase. These firms, their local business partners and the small and medium-size companies rely on the networks among them, and the industrial branch builds upon the local economic infrastructure, which determines the corporate competitive advantages fundamentally.

Clusters provide benefits to all involved. From a major firm's perspective, firms in a cluster share hard and soft infrastructure, energy, transportation, R&D, health and safety standards. It provides them with access to all players, attracting brainpower, expertise and local suppliers. In turn, it makes the industry more innovative to adopt technology and enables them to develop and export unique products and services. Major multinational firms can transfer benefits of innovation to their foreign subsidiaries. Working in a cluster brings benefit to firms in terms of their being seen as good corporate citizens. Businesses in a cluster have a stronger voice compared with individual firms in targeting government funding for R&D, infrastructure, skills development, legislation and so forth. (WORKING PAPERS, 2003)

According to the last, 2006 Innobarometer survey it can be determined in the European Union that on the average all 4. (at least 20 heads employing) firms work in cluster environment, what means in tight cooperation with other local undertakings. Considerable differences could be experienced between old and new member states inside the 25 member states of the EU. Maybe the newly joined countries haven't recognized yet the significance of clusters. The survey showed that the United Kingdom was outstanding in terms of clusterization, since 84 percentages of bigger firms made enough for the definition of „cluster" in the examined industrial branches. This proportion was tall in Latvia and Ireland too, where 67 percentages and 64 percentages of firms belonged to a cluster. Cyprus locked the row with 3 percentages, but the situation is not better in Poland and in the Czech Republic, where 4 percentages of firms worked in a cluster. (HÉJJ-MATUZ, 2008) The cluster concept as a political implement is novelty in Poland, but its significance is increasingly bigger especially in the innovational politics. Poland has a big potential to the forming of competitive clusters, but no measure was taken till now. The cluster concept is relatively modern in the Czech Republic, but more governmental programs try to develop the entrepreneurial

cooperation and small- and medium size companies. (HELYI GAZDASÁGI ÉS FOGLALKOZTATÁSI FEJLESZTÉS, 2005) The UK Department of Trade and Industry in 2001 commissioned a major study called "Business Clusters in the UK- A First Assessment" to provide a snapshot of existing clusters in the UK. It will be used by the regional development agencies as a base source of information for cluster development work.

Ireland has had a very conscious competitiveness policy for many years, and has used cluster concepts within this context. Ireland has for a long time used the cluster approach to structure its economic policy initiatives, for example in the area of FDI attraction. Hungary settled down somewhere in the middle of the row. 51 percentages of the asked firms believed that the cluster membership furthers the improvement of european competitiveness, but 42 percentages asserted the contrary. We can relate that there is some context between the commitment of the governmental politics and the cluster situation. The situation was in Ireland the most favourable, since the support of clusters was in that country the most considerable and the degree of clusterization was very high too. The smallest cooperation between clusters and the government was experienced in Latvia and in Slovakia where the number of clusters was cancelled to the driving Western European countries. (HÉJJ-MATUZ, 2008)

But which benefits make the cluster attractive for small- and medium-size enterprises and why the companies opt for the entry?

1. They can collaborate with each other while they work in competitive surroundings. Members have the opportunity residing in the cooperation may be exploited in such a way that their independence does not have to be sacrificed meanwhile.
2. Appearing on the international area is easier as a network's member. The one for which thank you can be said to the globalization is that the international markets' characters are already not independent, from each other separated working companies, but their associations, networks and clusters, also their collaborative groups.
3. One of the cluster-building's principal is the complementarity. Capitalizing each other's deficiencies and taking advantages of other's opportunities the members are able to contribute to the region's and the area's competitiveness.
4. SMEs can feel as a cluster's members that they have a lower vulnerability to market force conditions.
5. Companies can share appropriate business development strategies, market intelligence and ideas which has a favourable effect (spill over). Clusters strengthen social and other informal links, leading to the creation of new ideas and new businesses, which is easier because clusters improve information flows within industries. For example clusters may enable finance providers to judge who the good entrepreneurs are and business people to find who provides good support services.

In generality we can relate from clusters, that they are created because of their role in the economic development and their beneficial characteristics which are the followings:

1. The companies' competitiveness, by way of which firms may attain lasting competitive advantages, is increasable. With help of clusters may it possible to use specialized inputs, and to train motivated workforce for companies. They facilitate the fast and cheap achievement of knowledge and information, and institutions' and common goods' efficient use. The productivity may improve significantly in big local markets making utilization of the economy of size.
2. The division of labour (specialisation) improves the cluster members' productivity, thanks to the utilization of synergistic effects and the order of complementary activities beside the conservation of sovereignty.
3. In the cluster participant companies play a very important role in the local economic development, contributing to the increase of the region's/area's competitiveness and to the solution of local problems.
4. The innovational capacity can be expanded with the help of clusters. Clusters drive innovation and innovation drives productivity. To move a concept to a commercialized product, many organizations must cooperate and collaborate. Clusters provide the critical mass for this to occur by facilitating interaction by participants. Few companies have all the necessary skills to develop unique products and services by themselves, therefore clusters, rather than single companies or industries, are the sources for income, jobs and export growth. The market's better cognition, the common experiments, the dissemination of the cheaper accomplishment and the technological knowledge forces the firms competing with each other into a fast and efficient innovation hereby. The productivity improves in this manner, the companies can adapt to any kind of unexpected exterior change quickly concerned. For the programmes that emphasise collective services, like business advice, skill development or joint marketing, a key consideration is how to target services in a way that does not substitute for private provision. Finally, collaborative R&D projects through cluster programmes tend to involve more than one research institution or university in co-operation with several firms and often tap into external R&D funding sources and programmes.
5. New companies come into the area. Since the companies perceive the market gaps, the special input factors are better (technology, expertise) and the market's entry bars are lower (mainly in the supporting and related industrial branches of the cluster), more firms settle here because of these, or employees may turn into new one undertaking creating firms quickly. The cluster though not only for the undertakings being connected to cooperation is beneficial, but favours the region since the region's competitiveness (and productivity) improves, the incomes may be higher, new and competitive undertakings appear and the employment improves hereby. The companies' accommodating skill gets stronger because of the efficiency of the innovational capacity.

6. One kind of spatial agglomerational benefits can be noticed following from being concentrated, the benefits of localisation. The benefits of localisation are advantages for firms of the given industrial branch which are geographical concentrated. These include benefits which can be gained from the special industrial branch expertise, the special industrial branch institutions' and trainings' stretching, the specific infrastructure etc. which the companies of the given industrial branch may enjoy only. The benefits of localisation make the following possible for the members of a cluster (LENGYEL, 2002a-b):
   - the reduction of transactional and transportation expenses
   - a faster and more accurate information flow
   - a smoother input substitution
   - the cognition of industrial branch's technological and organizational experiences
   - the constant exchange of industrial branch's knowledge
   - spreading risks
   - starting of researches and developments
   - a local society's support (training institutions', an infrastructure's development)
   - a faster market adaptation
   - lower entry bars.
7. Supporting dynamic sectors may give them a competitive edge with important technological spillovers for the wider economy. Refocusing exposed sectors to new opportunities can preserve employment and promote restructuring of regional economies. Improving opportunities for certain priority sectors helps to target resources but often involves predicting the evolution of fast-moving product markets. On the other hand, providing a blanket cluster programme for all sectors or regions can dilute available resources and focus.
8. Advantage comes from the more efficient acquisition of tacit knowledge - sometimes called knowhow - that is carried in the heads of individuals and in the routines of organizations and is not published or otherwise formally recorded.Transfer of this knowledge requires the face-toface contact that occurs in business-tobusiness interactions and social, professional, and trade meetings. The greatest advantage of social capital and trust is derived from planned collaboration and network formation.
9. The spirit of trust and cooperation when everyone has equal opportunity to participate in the group. The group will be most successful when members rely on one another. Group members must learn to recognize and pool their talents, energy and resources to accomplish goals together.

Conclusion

Clusters build upon the cultural and industrial capabilities of a place, an area, or a region and in their activities built upon traditions and strengths they try to get a higher efficiency and to utilize the facilities in favour of the correction of the area's competitiveness. The conditions of competitive advantages can be measured only on a local level. The formulation of necessary developments is possible on a local level only. The organs working on a regional level play a very important role in the cluster-specific development and in the creation of suitable business environment. These activities include the following tasks:

- satisfaction of the labour market's special claims
- formation and actuation of special research institutes working on the area
- innovational centres', technological transfer centres', competence centres' foundation
- support of different development organisations and institutions.

Quickening of cluster-building, planning, use of central governmental sources, formation and development of common innovational infrastructure mean the dimension of cluster-building controlled centrally. Since the central government is not allowed to intervene in the global competition directly (deregulation processes, treaties, EU's competition policy), his aim is to correct the competitiveness through the improve of background conditions, to consolidate a suitable business environment and to create an innovational system with indirect tools. (LENGYEL-DEÁK 2002)

The central government's duty is approximating different characters to each other, and developing new cooperations among them. Beside this government may be an important participant in the support of supplier systems, and in the stimulation of cluster-building and innovational processes. A considerable task for the state is – on a national and regional level equally – that it assists the formation of different organisations and institutions (in many cases cluster management organisations, but there may be any kind of vocational associations, associations, or technological, innovational centres) which can satisfy clusters' claims but it should promote the development of key industries, the deepening of cooperation relations among clusters' participants and support the initiation of common investigational projects. In economic development which is founded on clusters' formation, affirmation and support, it's necessary to focus on the „cluster's heart". There is need onto new undertakings in the given area, which are based on special and local knowledge.

The government has several tools in order to persuade new, innovative undertakings to the settlement, for example with insurance of tax reliefs. In second step the government has to create a special environmental background in order that the specialized suppliers and service providers settle down in an increasingly bigger number in the region. So can a cluster-specific related

and background industry establish. The undertakings' concentration leads to the development of a special labour market, which provides a competitive workforce base to the undertakings working in the industrial branch, and contributes to the information flow among the firms. In the third phase totally new organizations, possibly institutions come into existence in the area. Their most important task is providing special services for the undertakings belonging to the cluster through the insurance of competitiveness's background conditions. The surroundings created in this manner has a vigorous attractive effect on cluster's wider environment. Undertakings apart from several clusters opts for joining to the cluster, which is favourable for the given area too. Finally the not in market evolved contact capital takes shape in the cluster among participant undertakings and non-profit organisations and institutions (KÁPOSZTA-NAGY-ÖKRÖS, 2008).

One of the most important morals of studies is nowadays, that single companies can not insure their long-term survival and can't increase their profit without they harm their competitors on the market. All Hungarian companies have to recognize first or afterwards that they are not able to fight in two fronts (on markets inside and outside) because it requests enormous efforts of them and imposes considerable material burdens on the organisations fighting with capital shortage. The markets' borders broadened out thanks to the globalization, what efforted an increasingly more intensive competition fight on a domestic and international level. In these circumstances there is need onto the cooperation and the sharing of resources in the interest of a superior, common aim, the survival. The success of the cooperation depends on government's activity in the formation of different cooperation forms (networks, associations and co-operatives), in the field of material sources' sending and in the information of the area. The government is able to influence the most important success factors, which can be summerized in the followings (www.co.ozaukee.wi.us):

- Public research and development
- Right business climate
- Improved business infrastructure
- Entrepreneurial culture
- Availability of capital.

We can see that the governmental politics can make a lot for the development of economy same as for the increase of clusters' number and their efficiency on a cluster basis, but to this it would be necessary to lay a bigger emphasis on these organisations. The spending of union sources, and the publication of applications which are necessary to the gainings are not enough. There is need onto the support of clusters presenting more year successful collaborative activity already, and onto the affirmation of leaving clusters. But it would be necessary to lay an even bigger emphasis on the radical alteration of corporate cultures, on the transformation of managers' view, on the performance of confidence and cooperational skill, same as onto the creation of inclination to the cooperation. Without these can

not be imagined the successful network cooperation and the appearance and subsistence on international markets.

While the origins and trajectory of clusters can differ, the key contributing factors to cluster success are intangible assets such as social capital. Clusters have been shown to promote collaboration and to create tacit knowledge. Government actions have to contribute to cluster success. Actions vary from adopting cluster-based economic development as a national policy, providing funding for cluster assessment and strategies, increasing R&D spending, infusing technology and being a demanding customer for clusters.

Through clusters states can better understand economies as systems and leverage change. This suggests new policies for strengthening and sustaining economies that enable governments to be more strategic, systematic, and efficient in their uses of public monies. No single sequence of actions fits all clusters, just as no solution fits every business situation. Each cluster has its own culture and conditions, and its needs and potential must be individually assessed. Policies have to be tailored, but there are experiences on which states can draw and some guidelines to help design appropriate policies. The policies address service delivery, investments, accelerated learning, and workforce preparation.

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THE MAIN CHARACTERISTICS AND PROLEMS OF THE ORGANIC POULTRY BREEDING IN HUNGARY

KINGA NAGYNÉ PÉRCSI-VIRÁG SZABÓ

Introduction

In connection with putting emphasis on the protection of the nature, the food-safety, and the differentiation of the product, organic farming and organic poultry production become sustainable alternative for some of the actors in the supply chain (stakeholders). It was often claimed in many publication that the small - and medium – sized firms of the poultry sector can take a chance from organic production. However, attention must be called to some limiting factors of the organic production. It causes problems also in the conventional producing forms that no agricultural area belongs to the 25-30% of the present livestock and there is a higher rate of those who have inadequate area.

On the one hand many stock-breeders have problems with the allocation of the manure, and on the other hand the conversion to organic production can only be imaginable if the soil-plant, plant-animal, animal-soil cycle is provided. (At the moment the animal density in the organic farming is very low, which excludes the evolvement of the cycle.)

From the point of view of the market it must be emphasized that the Hungarian producers producing organic products mainly for export purposes are facing a sharp competition in the common organic market. That is why the producers who want to change to organic farming must improve the production structure, the level of processing and stabilizing the distribution channels is also necessary. The producers also have to prepare to satisfy the domestic demand. In connection with this it must be considered that the consumer price of an organic product is much higher than the price of a conventional product, which sets a limit to the consumer interest in any case. The other reason for the limited consumer interest is the unsettled domestic market, which relates to the export orientation of the Hungarian organic farming.

Material and method

The material background of the research consists of the critical comparison mainly of the national literature. We used the data and annual reports of the largest contolling organization of the organic farming, called Biokontroll Hungaria. We can use the data of the other control organization only as an additional information, because they have only two publicly available annual reports from the last two year. So we can not use the data in our comparative analysis. After the interpretation of the publications We compiled a questionnary and drew up the most important hypotheses. We distributed

the questionnaires by post and e-mail. We chose the companies of the survey on the basis of the list of companies displayed on the website of the Biokontroll and the Bionet.

We must take account of the data of the farmers controlled by the other big control organization (Hungária Ökogarancia) in the latter analyses. The poultry stock controlled by them increased a lot in the last two years.

The market review of the organic farming

The farms producing organic articles get extra profit because the consumers pay higher prices for the organic products as compared to the conventional articles, this higher price is called organic premium. This premium is influenced by the followings:

- domestic or foreign market,
- demand-supply conditions,
- converted (organic) or partially converted product.

The agricultural economists search for the options, which can provide development opportunity for the small- and medium-scale enterprises. The organic farming is an option, but only in that case if the change of the parameters influencing the organic premium are taken into account in the process of time (JÁRÁSI, 2005).

In connection with the price of the organic product we must tal about a domestic price which gets away from the reality in the most cases and which is characteristic for the organic market of Budapest. It can be perceived that the capital grew out of the organic market place. That is why the sellers who sell their products in the neighbourhood of the organic market created their own heigher level of prices. This is only good for the organic farmers but is not in the interest of the consumers and the organic movement. The prices which are some times three-times higher here than the prices of the conventional products are irreail. According to the experience of many years the prices of the organic products are higher only by 30-40 % than the prices of conventional products (ROSZÍK, 2007).

There is demand for the organic products in the western markets (SZARKA GÁBORNÉ, 2007). Most part of the domestic production gets into export, but (for the sake of)for long-term security the domestic market must be improved (Plumer-Marselek, 2004). The aim is that the organic stands are evolved also in Hungary. There is also demand for the organic product in Hungary. A certan circle of the customer can afford to buy these products however only in small proportion.

The buying power of the majority of the customers is small compared to the high price of the organic products. The market and the chain of the stores are not organized in country level. There is no organized sales in the local markets. Adequate quantity and rhytmical supply of the organic product are needed for the organized sales of organic products.

This only can be achieved by the co-operation of farmers at least in the field of marketing (SZARKA GÁBORNÉ, 2007).

According to the abovementioned the organization of the sales is an important and continously changing area. Most part of the production is exported, but the number of the processing plants and the merchandizers are growing steadily (Table 1.) (PUMMER-MARSELEK, 2004).

The three main channels of the sales are:

- organic stores,
- direct marketing of the farmers,
- sales in the retail store chains.

Table 1. Processing plants and merchandizers

Year	Number of processing plants	Number of merchandizers
1998	17	2
1999	36	22
2000	36	54
2001	67	72
2002	100	92
2003	215	53
2004	273	67

Source:Pummer-Marselek, 2004

Every bigger town has organic market nowadays, or there is an organic corner on the conventional town market. There are three well-known and big organic markets in Budapest, where the customers can purchase fresh organic food. Most of the super- and hypermarkets sell organic food, mainly bakery and dairy products, flour, egg, but sometimes also vegetables and fruits (MEZEI-PAP, 2005).

According to KÜRTHY (2002) some organic farmers have not export opportunity. Rather the bigger farms are suitable for export trading. Only the bigger farms have independent export. The others export through integrating organizations. The buying of the food processing plants and the wholesalers are also considerable. The share of the retailers has not been considerable yet. The small farms sell their products toward the organic markets and small stores.

KOCH (2003) observed in the USA, that the customers got a food portion from the farmers for a sum of money in every week. The transport is done by the farmers. This practice can ease the lack of capital of the organic farms (PUMMER-MARSELEK, 2004).

Some more important characteristics of the organic animal husbandry

Constant and consistent growth of the number of organic animal keeping farms can be observed until 2004. This process is reflected by the growth of the livestock unit. However there is a decrease in the number of farms since 2005, we can see a concentration process which can be followed up in the last column of table 2. (livestock per farm).

The preliminary data of the farm structure survey in 2007 was shown that hardly more than 1300 organisation were contolled organic farms. (It means 12 % decrease during 2 years). Only 141 farms has organic livestock. Cattle and sheep were the dominant species in the structure of the livestock according to the data of the Central Statistical Office and the Biokontroll Hungária.

Table 2. The number and the livestock unit of the organic animal keeping farms in Hungary

Year	Number of farms	Livestock unit	Livestock per farms
1999	48	3784	79
2000	60	5083	85
2001	72	8387	116
2002	83	11855	143
2003	137	11210	82
2004	160	12253,6	77
2005	156	15673	100
2006	148	14931	101
2007	134	16430	123

Source: Biokontroll Hungária Kht, and own calculation on the basis of the data

Table 3. Structure of the livestock in organic animal keeping farms

Livestock unit (pcs.)	2003	2004	2005	2006	2007
Poultry	85,4	147,2	144,15	108,02	188,5
Buffalo	289,2	327,4	348,1	345,3	539,2
Red deer	-	-	23,15	-	-
Sheep	2273	2121,8	2087,57	1676,95	1255,95
Goat	260,5	252,8	200,88	284,42	304,26
Horse	341,2	247,3	209,8	386,74	229,92
Rabbit	-	-	0,16	-	-
Mule	-	1,4	-	-	-
Pig	444,8	703,5	527,19	655,8	830,45
Donkey	12,5	32,8	19,3	20,7	35,2
Cattle	7503,4	8419,4	12112,6	11453,1	13046,1
Total:	11 210	12253,6	15673	14931,03	16430
Growth %		9,3	27,9	-4,73	10,03

Source: Annual reports of Biokontroll Hungária Kht.

The Hungarian organic farms are rather growing organic plants than keeping animals.This is due to the fact that the organic product consumers are definitely vegetarians. On the other hand the organic meat consumption is not general because of their relatively high prices. However the main reasons are the producing and trading traditions, because the main income of the sector is practically given by the cereals since the end of the eighties (VARGA, 1998; MOLNÁR and MOKRY, 1999) . The statistical observations and our analysis equally confirmed the fact, that the organic animal keeping and the processing of organic animal products is still at a low level.

The organic animal stock is still at a low level in Hungary, the development in the area started at the begining of the twenties (Table 3.).

Table 4. Structure of animal breeding in livestock unit

Livestock unit (%)	2003	2004	2005	2006	2007
Poultry	0,76	1,2	0,92	0,72	1,15
Buffalo	2,58	2,67	2,221	2,31	3,28
Red deer	-	-	0,148	-	-
Sheep	20,27	17,32	13,32	11,23	7,64
Goat	2,32	2,06	1,282	1,9	1,85
Horse	3,04	2,02	1,339	2,59	1,4
Rabbit	-	-	0,001	-	-
Mule	-	0,01	-	-	-
Pig	3,97	5,74	3,364	4,39	5,05
Donkey	0,11	0,27	0,123	0,14	0,21
Cattle	66,94	68,71	77,284	76,71	79,41
Total %	100	100	100	100	100

Source: Annual reports of Biokontroll Hungária Kht.

Between 2003 and 2007 among the examined species the cattle-stock means the base of the organic farming with its rate of 70-80-percent (Table 4). The second most important species was the sheep (10-20%), while the sustaniable 10 % is given by pig, goat, horse, buffalo and poultry. The above mentioned facts are also true in the previous some year (Kovács- Frühwald, 2005). If we separately examine the species, we can see that the cattle-stock increased in the highest degree and in the sheep-stock was the biggest decline in the period of 2003-2007. (Table 6.) Furthermore, if we analyze the fluctuation of poultry-stock, we can determine that there was a decline in 2005 and 2006, there was only development in 2004 and 2007. (Table 4.) Maybe the bird flu caused the huge recession in 2006. The organic poultry are more endangered by bird flu because of the keeping technology. (They live between natural surroundings in the outdoors.)

Table 5. The rate of changes in the organic animal stock

Livestock unit (pcs.)	2003	2004	2005	2006	2007	Sum.
Poultry	-	61,8	-3,05	-36,13	80,48	103,1
Buffalo	-	38,2	20,7	-2,8	193,9	250
Red deer	-	0	23,15	0	0	23,15
Sheep	-	-151,2	-34,23	-410,62	-421	-1017,05
Goat	-	-7,7	-51,92	83,54	19,84	43,76
Horse	-	-93,9	-37,5	176,94	-156,82	-111,28
Rabbit	-	0	0,16	0	0	0,16
Mule	-	1,4	0	0	0	1,4
Pig	-	258,7	-176,31	128,61	174,65	412,65
Donkey	-	20,3	-13,5	1,4	14,5	22,7
Cattle	-	916	3693,2	-659,5	1593	5542,7

Source: Own calculation, on the basis of Földes, 2008

Table 6. Change of the organic animal stock between 2003 and 2007 (%)

Livestock unit	2003	2007	Change %
Poultry	100	145,3	45,3
Buffalo	100	186,44	86,44
Red deer	-	-	-
Sheep	100	55,25	-44,75
Goat	100	116,79	16,79
Horse	100	67,38	-32,62
Rabbit	-	-	-
Mule	-	-	-
Pig	100	186,7	86,7
Donkey	100	281,6	181,6
Cattle	100	173.86	73,86

Source: Own calculation

Unfortunately, farmers keep few animal temporarily; moreover these animals are bred by 40 % of the farmers. This is a disadvantage for the farmers, because they can not take advantage from the complexity of organic farming, which bases on the principle, that the plant growing has a role in the feed supply and the animal keeping gives the needed manure. (ABAYNÉ, 2002; MARSELEK, 2004) There is a demand mainly for the organic pork, poultry meat and beef. The organic egg and dairy products made from cattle and goat milk are also very popular (KECSKÉS-KULCSÁR, 2003). In connection with the abovementioned it can be stated that the export of the organic mangalica

is growing steadily. It is our second most important export article after the grey cattle. The Spanish export became more and more important, because the mangalica is in request in Iberia as the raw material of the famous serrano ham. But there is an increasing demand for mangalica meat and processed meat also in Hungary in the last couple of years (MIKLÓSNÉ, 2004). To get some information from the other control organization we can take a look at the table shown below (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

Table 7. Number of animals kept by the farmers controlled by Hungária Öko Garancia

Animal group	2006			2007		
	pcs	Livestock unit	170 kg/ha N equivalent	pcs	Livestock unit	170 kg/ha N equivalent
Cattle younger than a year	25	10	5	310	124	62
Cattle, male, between the ages of one and two	10	6	3	35	21	10,5
Cattle, female, between the ages of one and two	165	99	50	187	112,2	56,1
Two-year-old, or elder male cattle		0		16	16	8
Dairy -cattle	10	10	5			
Breeding heifer		0		50	40	20
Other cattle		0		498	498	199,2
Calf	6	2,4	1,2	176	70,4	35,2
Cattle	216	127,4	64,2	1272	881,6	391
Sheep	4	0,622	0,3	18	2,8	1,4
Goat	255	38,25	19,2	158	23,7	11,9
Piglet	351	9,391	4,7	299	8	3,9
Sow	103	51,5	15,8	130	65	19,5
Porker	361	108,3	25,8	761	228,3	54
Other pigs	170	51	12,1	44	13,2	3,1
Pig	985	220	58,4	1234	314,5	80,5
Chicken	8540	59,78	14,7	38000	266	64,6
Hen		0		70	0,098	0,3
Duck		0		3585	25	6,1
Other poultry (goose, turkey)		0		60	1,8	0,9
Poultry	8540	59,78	14,7	41715	292,9	71,9
Total			156,8		1515,5	562,8

Source: Annual Reports of Hungária Öko Garancia

Problems in the organic farming

The dynamic development of the organic farming can be observed in the whole world, also in Hungary (PUMMER-MARSELEK, 2004). The economic motivation becomes dominant at the farmers decision making process as the farm size increases. The main aim of bigger farms is getting profit from the organic farming while the motivation of the smaller ones is the protection of the environment, and the production of healthy food (SZARKA GÁBORNÉ, 2007). The regulation of the organic farming is in accordance with the regulation norms of the EU. The logistic system, the marketing work, the product processing and the education are a little bit underdeveloped in Hungary. To improve the unity of organic farming, the proportion of the animal products must be increased within the organic products (PUMMER-MARSELEK, 2004). There are four area where the organic farming lags behind in Hungary:

1. The first is the lack of supply and sale cooperations.
2. The second is the low volume of the organic animal keeping
3. The third is the lack of developed common mareting.
4. The fourth problem is that the proportion of the processed product does not approach the level evolved in the old member states of the EU.

This last one can be explained by the narrow development sources/means and by that it is not easy to access to the subsidies and loans. Taking subcontractors into the shaping of the supply chain can be a solution. There are many good cooperation for years, which might have advantages for both participants. The free capacity of the processor can be engaged and the organic farmer can place more processed products in the market (ROSZÍK, 2008). Naturally the subcontractors must be involved into the controlling system of the organic farming, which means costs. Sometimes the costs exceed the profit, which can be available from the sale of the more processed products. So it is important that the services of a subcontractor would be used by more than one organic farmer. This way the emerged costs can be divided (ROSZÍK, 2008). To highlight the problems waiting for solution the followings can be mentioned.

1. Financial problems: the costs increased more than the incomes. The asynchronism between the cost and the income in the time.
2. Market: sales problems, disappearance of distribution channels, weak yield, lost of markets.
3. Human factor: breach of contract, one-sided reduction in the agreed price.
4. Rules and subsidies: missing of subsidies, much administration
5. Marketing: improper communication of the organic label, lack of informative and sales promotive actions.

The results of the survey made among the organic farmers

Up to now we can analyse closer four poultry keeping farmers among those which are controlled by the Biokontroll Hungária. However we can manage to contact the largest domestic organic poultry breeder registered at Biokontroll with the help of the mentioned control organization.

On the basis of the survey of the farmers the following statement can be made:

Conversion to organic farming:

In the first part of the questionary the respondents said that the aim of the conversion is sustainable farming. The optional answers were the getting of income, subsidies and the cost reduction. This attitude is determinant for the profitable future alternative farms. The farmer can face difficulties during the conversion. Every respondents had some problems during the conversion.

Data of the organic farming:

The plant growing relates to animal breeding almost in every farm, however we cannot talk about a considerable stock in any species (that means more hundred or thousand pieces). We especially cannot talk about large stocks in connection with the poultry. The economic importance of the poultry keeping is mainly the pest-control. However one of the farmers keeps ten thousand pieces of organic poultry stock. He sells the poultry meat processed to the retailers or direct to the customers.

Sales:

The respondent sell their products in the organic market or in own organic shop. Getting into a market and keeping it is crucial for the organic farmers. This was confirmed by the respondents also.

Incomings, outgivings:

In connection with the incomings and outgivings the respondants reported cost reduction: the cost of the medicines is fewer, and they do not have to spend money on fertilizers, pesticides and insecticide. They have more income in comparasion with the income of the conventional farms.

Observations:

To summarize the abovementioned, it can be said that the organic farmers keep wide range of species of the animals. „A little from everything" principle prevails in the surveyed farms. They think improving tourism is a good way to develop organic farming. Except one, none of the farms registered by Biokontroll has a remarable poultry stock. The economic importance is neglectable as regards the surveyed farms.

Conclusion

The organic farming means a solution mainly for the farmers which keep more animal species, grow plants and have a smaller poultry stock. The higher sales price and the possible subsidies let the farmers to achieve more income than the conventinal farmers. On the basis of the publications it can be said that there is no solvent demand for organic poultry. We cannot talk about serious organic poultry breeding among the farmers only some additional activity which has an economical function. Prospectively the production will not be determinant since the available land is narrow and since there is lack of domestic solvent demand.

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ROLE OF AGRICULTURE IN RURAL ECONOMY - POSSIBILITIES OF LOCAL DEVELOPMENT IN AREAS DEPRESSED BY AGRICULTURAL UNEMPLOYMENT

KRISZTIÁN RITTER-LÁSZLÓ VILLÁNYI

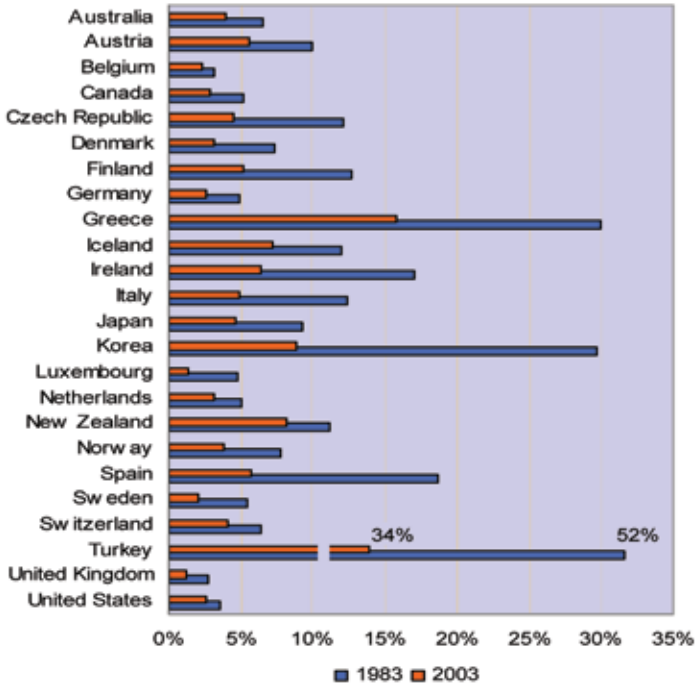
Introduction

The global economic tendencies, the globalization and the spatial restructuring of the European economy have led to the increasing importance of the spatial policy recently. One of the basic consequences of the globalization is the change in the role of territories and localities as well as their increasing value, resulting that the creation of the conditions for development is not merely the governments' responsibility, but also it has become the duty of the settlements and territories due to the emphasis on the endogenous theories and own resources. The endowments and potentials of the territories have come to the frontline (especially the human capital), which are available for the developments as internal resources and can be activated under appropriate circumstances (DICKEN 2003, KULCSÁR 2008, SWINBURN et al. 2004). Another important element is the strengthening and changing of the expression "rural", since it has meant a totally different and new dimension of the society and the economy in the developed countries for a while (OECD 2006). In addition, as the place and base of multifunctional agriculture, rural areas play important role in the EU's Common Agricultural Policy as well. However, the general problems of the rural areas (e.g. depopulation, fewer employment opportunities, increasing social burdens, accessibility to the basic services etc.) cannot be ignored. It is mainly caused by the fact that the importance of agriculture has gradually decreasing in the total employment (Figure 1.). As a result of that, the unemployment causes further problems in the rural areas (see OECD 2006, SERA 2006).

Similarly to the average EU tendency, the sector's role in the employment has sharply dropped in Hungary as well (Figure 2.), which did not affected the rural areas the same way, due to the spatial structure and the change in the spatial characteristics of the economy.

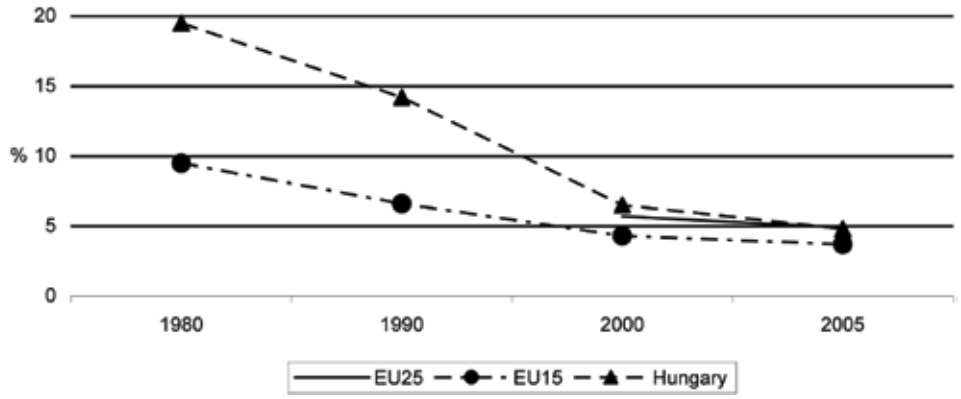
The negative effects hit more those rural areas, which have agricultural traditions and unfavourable structure of the human resource. The decreasing role of agriculture is accompanied by the crowding out of former agricultural labour of the labour market and the difficulties they face while flowing into other sectors. This process seems to contribute to the increase in the spatial inequalities in Hungary.

Figure 1. Share of agriculture in total employment (%)



Source: OECD 2006

Figure 2. Share of agriculture in total employment in the EU and Hungary



Source: Eurostat

Based on earlier researches and the literature it is supposed that the decrease in the employment role of agriculture, the bad structure of the former agricultural workers, the lack of other jobs, the limited local resources and potentials have caused significant and lasting agricultural unemployment

in several rural areas. It is also supposed that the barriers of local developments highly render more difficult to the solution of the problems. Therefore the major aim of the paper - as a starting point of a long-term research analyzing the possibilities of LED in lagging rural micro-regions - is to discover Hungary's rural areas suffering from *agricultural employment crisis* (with high and lasting unemployment rates in agriculture) and to compare them to the spatial inequalities (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

Materials and methods

The main objective was not to show the most up-to-date situation, but rather to concentrate on the changes happened between 1990 and Hungary's EU accession in 2004. Therefore the examinations have been carried out on the basis of the micro-regional system of the last year before the accession, i.e. 2003 (150 spatial development-statistical micro-regions), not taking the data of Budapest into account. Since the changes in the micro-regional structure, happened after the examined period, have not affected significantly the micro-regions that had been defined, the results are valid for the present structure.

The first analysis, based on the data of the census in 1990 and 2001 interpreted by the Central Statistical Office (CSO), has searched for the reduction in the rate of agricultural employment within the total employment, aggregating the settlement-level data of the two censuses, according to the micro-regional structure valid on 31 December 2003. The territorial distribution of the registered agricultural unemployment (concentrating on its continuity and long-lasting) has been studied based on the registered unemployment rates, taking the database of the Employment Office (EO) into consideration. For the comparison between the territorial distribution of the registered agricultural unemployment and the economic-social spatial structure of the country, the data of the two census (1990 and 2001) and the micro-regional aggregates of the annual settlement-level data of the CSO T-STAR database have been used. The paper is based on the processing of secondary information originating from the abovementioned data basis relied on the statistical instruments and the possibilities provided by multivariable statistical methods (factor-, discriminant-, and cluster analysis) and the SPSS program.

Results

The first aim was to state which Hungarian micro-regions have been affected the most unfavourably due to the political-, economical and social transition concerning the agricultural labour force. The followings have been considered in the research:

- Reduction in the rate of agricultural employment (on the basis of the census in 1990. and 2001.);

- Rate of registered agricultural unemployed people in the given year (thereafter: agricultural unemployed) (on the basis of the data of EO between 1990-2003);
- Rate of lasting (registered more than 12 months before) agricultural unemployed (on the basis of the data of EO between 1990-2003).

Combining the three aspects those territories can be defined (as *territories with agricultural employment crisis*) where, on one hand, the rate of agricultural employment decreased significantly (which is not a crisis-sign itself), on the other hand, this decrease has resulted in high, continuous and long-lasting agricultural unemployment (as a result, three groups have been created from the selected micro-regions by cluster analysis with the help of factors and basic indicators examined below - see Figure 3.).

Figure 3. Micro-regions with agricultural employment crisis, 2003

Cluster No. 1. Rural areas in multiple unfavourable conditions with agricultural employment crisis

Cluster No. 2. Relatively undeveloped rural areas with agricultural employment crisis

Cluster No. 3. Rural areas with potential dynamism and agricultural employment crisis

Source: own calculation

Concerning the methodological aspect, those micro-regions have been selected which had their indicators from the upper quarter in all the three cases. It is possible that the other sectors could not absorb the agricultural unemployment of the defined micro-regions (because of the lack of jobs nearby, the limited accessibility of the selected areas, or the requirements for more qualified labour force by the other sectors).

As first step, the analysis of the relation between the agricultural unemployment and spatial inequalities (at micro-regional level) has been carried out with factor analysis. In order to do the examination, important indicators have been created based on the literature and other researches (for details see RITTER 2008). The eight main factors (Table 1.), as a result of the

analysis, explain 85,413% of the information content of the original variables (variance). Naming the factors has been carried out based on the basic indicators contained by them and their positive or negative contribution (factor weight) to the factors.

Table 1. Factors of the spatial differences and their information content

Factor	Rotated factors		
	Own value	Deviation (%)	Cumulated deviation (%)
Economic dynamism (F1)	11,46	22,48	22,48
Social status and level of development (F2)	10,63	20,84	43,31
Qualification (F3)	5,57	10,93	54,24
Tourism (F4)	4,41	8,65	62,89
Youthfulness (F5)	3,52	6,9	69,79
Population growth (F6)	3,39	6,64	76,44
Urbanization (F7)	2,83	5,55	81,99
Exposure to agriculture (F8)	1,75	3,42	85,41

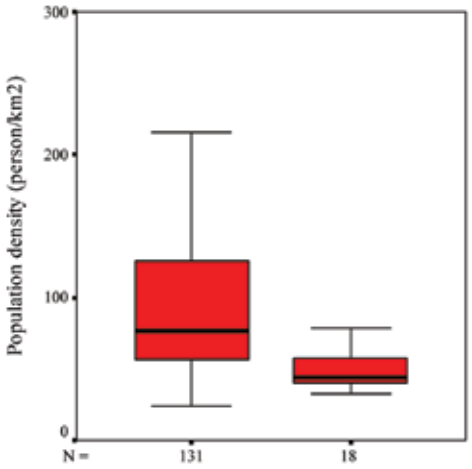
Source: own calculation

The spatial differences - based on the factor structure - must be searched in the dynamism of the territories (population- and economic density), in the performance of the local economy, in the load of the social systems, in the human resource (especially education), in the settlement-structure as well as in the subjectivity to agriculture. Based on independent samples T-test and discriminant-analysis it can be stated that the selected 18 micro-regions suffering from agricultural employment crisis are in more unfavourable social and economic status compared to the other territories, the qualification of the human resource is poorer and the agriculture clearly has significant role. The discriminant-analysis have been expanded for the basic data involved in the factor analysis as well. The interpretation of the indicators producing the most important and significant differences as well as the consequences drawn can be found below.

The selected micro-regions have much lower population density than the others, since they are also the least inhabited areas in the country (Figure 4.). This result is very important because the population density, as a spatial indicator, has influence on the further tendencies (OECD, 2006). While comparing the number and the rate of unemployment and those of the people getting social payments, it can be stated that the selected areas show significant arrears compared to the others. Regarding the unemployment, the 18 micro-regions have the worst figures even in absolute terms in Hungary. Comparing the lasting and the spatial characteristics of unemployment, the Eastern and Southern areas with agricultural employment crisis show long-lasting high unemployment rate (in their cases the relation between

the small-sized settlements and the high rate of gipsy population is really strong). The other selected micro-regions have lasting medium-level rate of unemployment, because they are closer to bigger cities and transportation routes, or just simply because of the development level of their regions.

Figure 4. The population density in the two major groups



Source: Own calculation

Regarding the qualification of the unemployed people the arrear is significant in the case of the unemployed people, based on the rate of unemployed with fewer than 8 grades. The average of the 18 micro-regions is 9,7%, while that of the 131 is 6,8%. Though, it is more important that in the selected group the labour force leaving agriculture shows a much more unfavourable picture, since their qualification was rather poor in the examined period (Table 2.).

The unemployment may be caused by the lack of local jobs. Regarding the number of locally employed people, the local enterprises and private enterprises, it can be stated that in the selected areas there are significantly fewer opportunities to work locally, while, regarding the local employment, the 18 micro-regions are among the least favourable ones in Hungary.

Unemployment and the lack of jobs highlight the importance of links to developed areas and centres and to examine how the labour is able to take jobs in big cities nearby and how much the transportation system allows that. Accessibility is important for the domestic and foreign large-scale companies and SMEs to approach the free, but not too mobile labour force in Hungary. However, at the end of the selected period, the accessibility[4] of the selected micro-regions is unfavourable, even in absolute terms (Figure 5.).

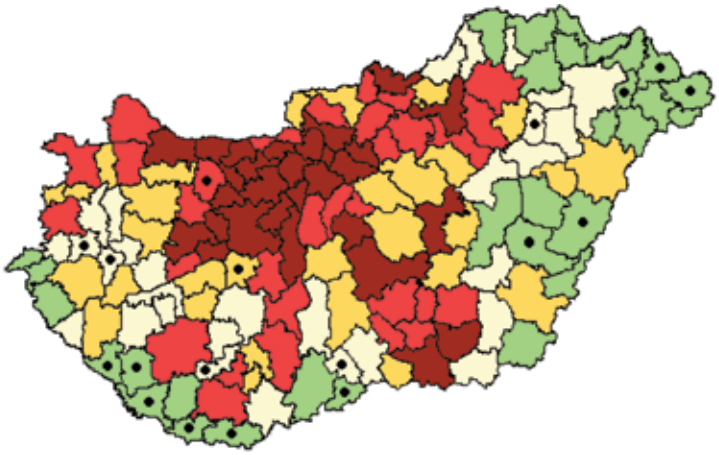
[4] In the model, compared to the average of the settlements, the accessibility of Budapest has 40, the two closest county- and micro-regional centers have 25-25, and the own value based on the institutional system of the settlements has 10% weight (see FALUVÉGI 2004).

Table 2. The agricultural unemployment according to qualification in the selected micro-regions (1990-2003, yearly average) (%)

	Sásd	Sellye	Siklós	Bács-almás	Zalaszent-grót	János-halom	Enying	Berettyó-újfalu	Polgár
Max. elementary	69,71	67,56	70,36	55,79	60,83	54,05	71,45	61,14	58,2
Secondary school	22,28	23,36	23,6	28,63	26,61	34,73	21,76	29,4	29,02
School leaving exam	7,28	8,57	5,37	7,46	10,73	8,95	6,05	7,29	11,16
Higher education	0,73	0,51	0,67	1,46	1,84	2,27	0,74	2,18	1,62
	Kis-bér	**Barcs**	**Csurgó**	**Szeg-halom**	**Baktalóránt-háza**	**Fehér-gyarmat**	**Vasvár**	**Vásáros-namény**	**Nagy-atád**
Max. elementary	60,17	67,31	67,96	54,49	66,13	59,01	52,23	58,39	60,06
Secondary school	27,95	25,69	23,79	29,56	26,51	30,52	34,03	28,22	29,3
School leaving exam	9,46	6,12	7,6	8,47	6,48	9,58	12,95	12,32	9,09
Higher education	2,41	0,88	0,66	0,81	0,87	0,88	0,79	1,08	1,54

Source: own calculation based on EO data

Figure 5. The accessibility of micro-regions in Hungary, 2002

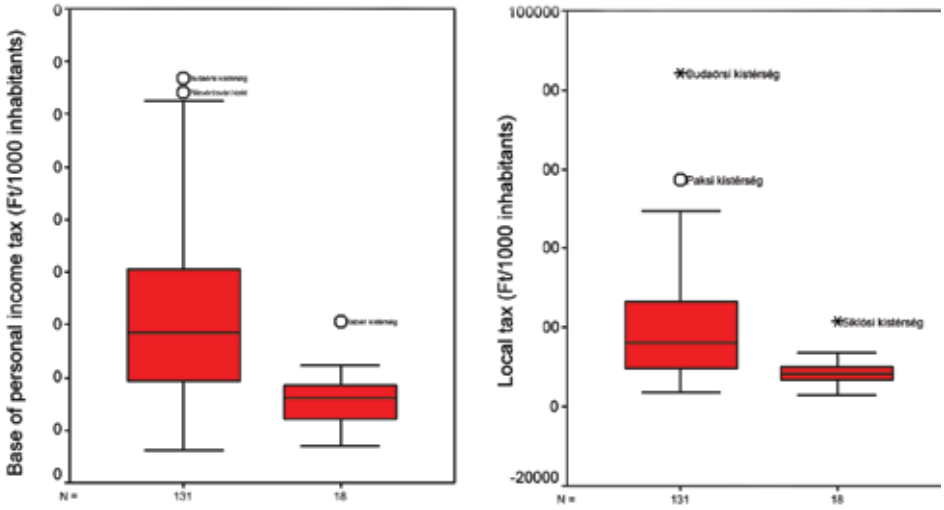


Accessibility categories (higher scores mean better accessibility):
■: 1,73 - 2,76 □: 2,76 - 3,17 ■: 3,17 - 3,47 ■: 3,47 - 3,94 ■: 3,94 - 5,00
●: Selected micro-regions

Source: Faluvégi 2004

The accessibility reduces further the already low job and capital attractiveness. The lack of local employment and the difficult accessibility of job offers outside the area are proven significantly by the higher social burdens, the lower local tax incomes and the lower base of personal income tax of the selected areas compared to the others (Figure 6.).

Figure 6. The base of personal income tax and the local tax in the two groups



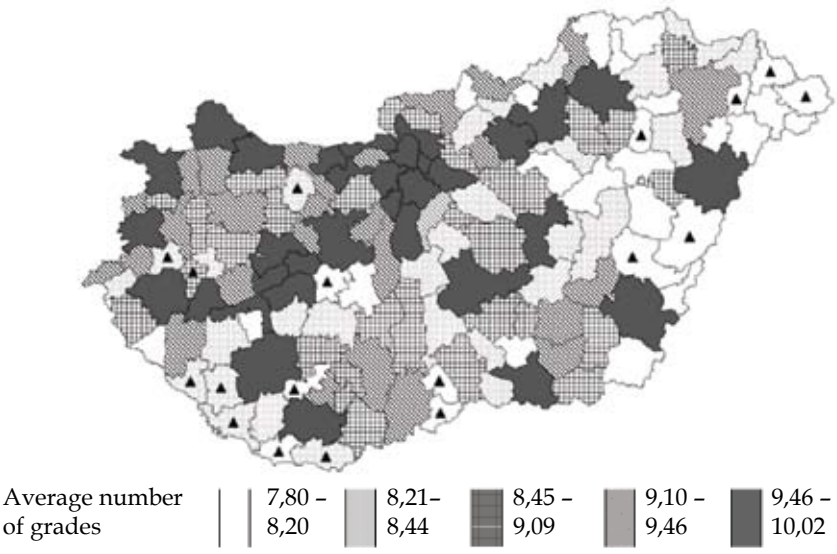
Source: own calculation

Two unfavourable tendencies must be mentioned. One of them is the decrease in the solvent demand, which prevents further services and jobs. The other problem is that the low local incomes may question the possibility of local developments.

According to the literature (e.g. BARTUS 2003, KÖLLŐ 2006), benefiting from commuting greatly depends on the qualification of the population concerned. Examining the spatial distribution of the qualification, it can be stated that the appearance of the agricultural employment crisis implies the low qualification level of the population concerned (Figure 7.). This fact can be emphasized due to the coherence between the number of primary grades and the development of a micro-region based on the literature and the results of the factor-analysis of this research.

In several small rural settlements there are hardly any other economic activities but agriculture. Therefore the agriculture and the related activities basically influence their ability of keeping the population (HAMZA et al. 2002). Regarding the yearly average migration between 1990 and 2001, it can be stated that all the selected micro-regions show negative migration except for Vásárosnamény, and at the end of the examined period (2003) the selection implies with stronger migration (in the 18 micro-regions clear outmigration can be experienced, while in the other 131 micro-regions the balance is positive on average - see Table 3.).

Figure 7. The territorial distribution of the population's qualification in Hungary, 2001



Source: Own calculation

Table 3. The balance of migration in the two groups in 2003

Groups	Average	Percentiles (%)						
		5	10	25	50	75	90	95
Not selected	0,729	-7,818	-6,396	-3,378	-0,19	2,466	9,442	16,678
Selected	-3,308	-9,899	-7,555	-6,172	-3,449	-0,438	2,626	

Source: own calculation

It can mean that because of the lack of jobs the mobile and qualified labour force leave/have left their former residence, thus weakening the other figures within the education factor. In addition, high rate of people leaving the agricultural sector in the selected micro-regions is from the age-group over 45 years (Table 4.). For this age-group, migration and commuting may be difficulties because of the qualification problem. Thus, the agricultural employment crisis may ruin the demographic conditions of the areas and preventing the settlement of further opportunities and jobs. The difference between the two groups is characteristic, even if we calculate the agricultural enterprises compared to the number of population or to the total number of operating enterprises (Figure 8.).

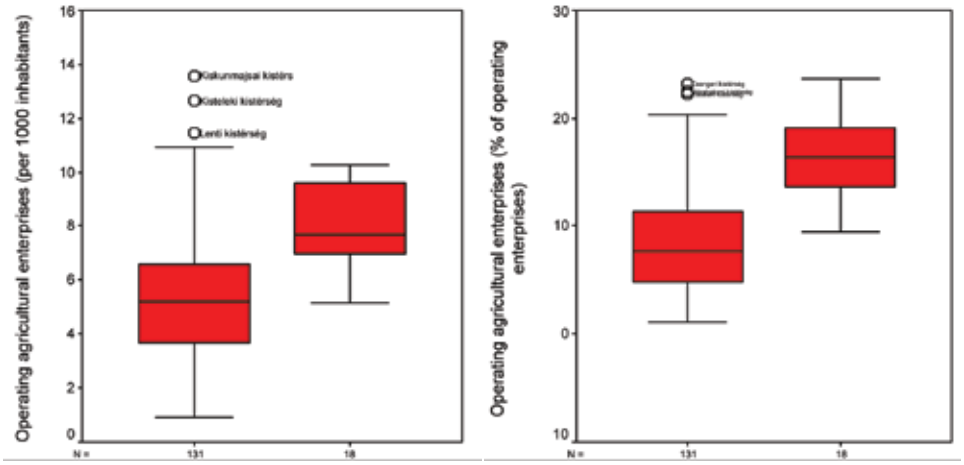
Table 4. The agricultural unemployment according to age groups in the examined subregions (1990-2003, yearly average) (%)

Age groups	Sásd	Sellye	Siklós	Bács-almás	Zala-szent-grót	János-halom	Enying	Berety-tyó-újfalu	Polgár
15-25	13,12	16,23	13,99	12,99	13,75	11,55	11,66	11,17	19,72
26-35	29,07	28,69	32,09	23,93	24,91	25,92	23,47	27,4	29,11
36-45	34,22	32,27	32,38	33,68	27,88	33,51	30,24	33,82	28,27
46-	23,59	22,81	21,55	29,4	33,46	29,01	34,63	27,61	22,91
	Kisbér	**Barcs**	**Csurgó**	**Szeg-halom**	**Bak-talórántháza**	**Fehér-gyarmat**	**Vasvár**	**Vásáros-namény**	**Nagy-atád**
15-25	11,92	12,53	14,9	11,57	18,74	17,52	14,57	20,28	19,81
26-35	24,72	28,86	31,09	25,05	28,25	28,12	25,67	31,14	30,7
36-45	30,69	33,3	30,56	33,19	34,78	32,52	28,27	30,72	29,29
46-	32,67	25,32	23,44	30,2	18,23	21,84	31,48	17,86	20,2

Source: own calculation

The 18 micro-regions are clearly and significantly characterized by the exposure to agriculture. On one hand it is because they are traditionally agricultural areas, on the other hand, it is because the agriculture is a forced line, due to the lack of other opportunities.

Figure 8. Agricultural enterprises in the groups



Source: own calculation

Finally, based on discriminant-analysis, the two groups can be best distinguished by the rate of operating agricultural enterprises and the number of registered unemployed people per 1000 inhabitants. It can be definitely stated that agricultural unemployment fundamentally affects the labour market of

the selected areas, and the population leaving agriculture basically influences the rate of unemployment.

Conclusions

The transition to market economy and the globalization did not leave the Hungarian spatial structure untouched in the past two decades. Along with the changes, the role of agriculture in the employment has significantly decreased. It can be stated that these changes affected several rural areas unfavourably, and those micro-regions can be defined where the phenomenon can be experienced through the agricultural unemployment. The areas involved in the examination have strong correlation with the spatial inequalities from the agricultural unemployment aspect. Being aware of the relation with the spatial inequalities and the characteristics of the labour leaving the agriculture, it can be stated that there is no possibility for that labour to get back to the labor market, at least in short terms. It is because there are limited job opportunities, it is difficult to access the workplaces outside the area and the level of qualification and the age structure of the human resource are not sufficient. These factors, however, raise the issue of the development potentials locally. This is really important from the unemployment perspective because in long terms it is the economic development and not the employment- and social policy that can bring real positive results, according to the literature (G. FEKETE - VELKEY 2002). However, from that aspect the 18 micro-regions lag behind concerning the necessary local resources (especially the human resource). Several reasons make articular the importance of agriculture in the rural development in the examined areas. The first reason is the traditional agricultural farming of centuries and the importance of the accumulated knowledge. The loss of such knowledge and experience is a real danger if the role of the sector is decreasing. A further reason is that in these areas agriculture is usually the single one alternative (or chance), providing living and earning for the population. In this approach, taking advantage of and strengthening the social function of the agriculture are principal task of the developments. This is inevitable also from the large rate of gipsy population aspect. However, it must be stated that the development of agriculture cannot be the only solution for the areas involved in the examinations. The traditional agricultural approach cannot result the increase in the employment in the rural areas. Regarding the rural policy, the focus must be put on the supplementary measures and programs in addition to agriculture. The possibility for development outside the agriculture is rather questionable - at least under the current circumstances. The most important obstacle of the developments is its subject, i. e. the human resource. The situation is even more difficult, because of the lack of local jobs and services it is hard to keep the qualified labour force, while its lack keeps away the investments and workplaces also due to the bad accessibility, social burdens and unfavourable demographic tendencies. From the aspect of job creation, the community-based economic development and the

implementation of public utility projects may have important role in the future. In many areas with disadvantageous situation, therefore in the areas selected in this paper, it is almost impossible to develop the economy on market-base. According to international practice and experience (e.g. Leader programs), the solution in such areas is the civil and non-profit-based development, using the tools of community animation. Based on the results of the research the following aims could be defined in the separated three clusters:

- The examination of the suitability and the success of the Union's funds, especially in the rural development (regarding the job creation and maintenance, the alternative ways of earning incomes, diversification and the training of human resource);
- A more exact definition and calculation of the agricultural unemployment; discovering the characteristics and intentions of agricultural unemployed as well as their chances to get back to the labour market; studying the experience of employment/labour offices of the areas concerned;
- The definition of the practical needs, desires and potentials of the actors concerned in the local developments;
- Studying the international experience related with the topic, examining their adoptability;
- Discovering and encouraging efficient cooperation potentials between settlements, micro-regions and regions;
- The examination of solutions for maintaining the social function of the agriculture.

Finally, based on the conclusions of the research, the social reasons are recommended to be at the first rank while defining the rural development, since it makes the rural development especially important.

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PRACTICAL EXPERIENCES OF LEADER+ PROGRAMME

EDINA SÁRINÉ CSAJKA-MÁRIA BOSZNAINÉ HORVÁTH

Introduction

Among the EU community initiatives LEADER Programme deals with rural development, which is the most successful rural development programme of the EU. LEADER stands for the abbreviation of the French expression: Liaison Entre Actions pour le Development de łEconomie Rurale, which means the links between actions for the development of the rural economy.

In Hungary, the LEADER Programme is in the third phase of its history. The pre-accession funds for the LEADER pilot programme was replaced by the Agricultural and Rural Development Operative Programme's (ARDOP) LEADER+ programme after the accession. During the planning period between 2007 and 2013 the rural development measures are integrated in the New Hungary Rural Development Programme. The current study aims to summarise the most significant experiences of the ARDOP LEADER+ programme closed this year, based on the example of the Zselica Action group. This action group belongs to few of those that took part in the LEADER pilot programme, as well; thus the long-term effects usually being difficult to analyse are visible, as well.

Material and method

The basis of the primary research is partly the analysis of the submitted and implemented projects (number 17) applied for any of the 5 measures of "ZSELIC LIGHT" Local Rural Development Programme; and the deep interview conducted with the manager of the host organisation provided also information to be analysed on the successes and challenges of the program. The members of the action group defined the following measures of the program:

1. Placing stopping, knowledge transfer and information boards, brochures
2. Establishing student bases
3. Organising study trips
4. Completing feasibility study
5. Running a village development service

Results

Zselica Local Action Group was established near Kaposvar on the 27th of June 2005, as the consortium of 27 local governments, a school, eight civil organisations, a private person and a private company. The size of the action area is 504.97 km2, with 19223 inhabitants involved in the local rural development

program named "Zselic Light". Its territory is bordered by Somogy Hills on the north, Belso-Somogy on the South and West, while the Valley of Kapos River on the East (Figure 1).

Figure 1. The territory of the Action group "Zselica"

Source: Banya Panorama Association

Due to the effect of the results achieved in the LEADER+ pilot project of the Hungarian Ministry of Agriculture and Rural Development, the earlier members of the action group initiated participation in the LEADER+ programme and to establish the action group "Zselica". The leader organisation of the Action Group was the local government of Boszenfa that already had experiences in implementing community development programmes. The host was the Banya Panorama Association that has been involved in rural, settlement and community development actions, and was earlier the host in the pilot project.

The executive officers of the municipalities, the representatives of the civil organisations and private persons formed the Local Review and Monitoring Committee. In order to consider the ideas of the local people in the Local Rural Development Programme, the inhabitants were invited on workshop discussions and asked by questionnaires. By considering the useful motions made, the action group completed its Local Rural Development Programme.

Among the objectives of the programme the following are listed: economic and tourism related utilisation of natural values and cultural heritance, strengthening village communities, human resource development and network building. Further aims of the programme are to make it possible

to visit existing Hungarian and international model sites, to design the product image of the settlements and to attract the younger generation into the area. Regarding the spatial-specific aspects, the plight analysis considers tourism as break out point in the settlements of Zselic. All of the measures defined in the rural development programme "Zselic Light" organically related to this issue. The tasks defined by the five measures of the Local Rural Development Programme are:

Component 1: assignment of adventure tourist routes. With this element the sights and places of interest of the settlements, adventure cottages, natural and cultural values and the people living here were introduced to the tourists. Resting areas were established and in order to ensure easy orientation, stopping, knowledge transfer and information signs were placed.

Component 2: the attractions are necessarily joined with student bases. Without each other, the first two components would not be able to attract guests easily for more than one day in the Zselic.

Component 3: organising and participating study trips helped the owners of adventure cottages, local governments, civil organisations and the private company to find and provide ideas on quality hospitality.

Component 4: the product images of the particular villages were defined according to the development conception based on adventure cottages and local attractions and places worth seeing. This opened up the way to create their Local Rural Development Programme.

Component 5: The "village development" service contributes to a better access to information and provides professional assistance to recognise the values and to realise them in specific products.

Emphasised areas of the Rural Development Programme:

Assigning the routes of round trips, creating brochures

Attaching the villages of the area to round-trip routes; and documenting natural and cultural values, places of interest, sights and attractions, existing and newly formed services, investments in brochures.

Placing stopping, knowledge transfer and information boards, signs

Placing stopping, knowledge transfer and information boards along and concerning the tourist routes assigned in the Local Rural development programme; which help easy orientation and information transfer by showing the sights and places of interest, natural and cultural values, attractions and services in the settlements.

Establishing resting areas

In order to create a quality level and attractive environment, resting areas were established by placing benches, desks, litterbins, open fireplaces, summer-house, etc. on both public and private areas along the tourist routes assigned by the Local Rural Development Programme "Zselic Light".

Improving the services of adventure cottages

Further development of services introducing the values of the settlements, creating new services and model cottages, improving cottage image in order to provide alternative and additional income opportunities.

Establishing new student bases, renovation of the existing ones

Establishing new student bases and the renovation of the existing ones ensure opportunities for the young to stay in the Zselic for a longer period and to become active participants in the development of the area.

Organising study trips

Supporting Hungarian and abroad studies. Gaining experiences, building partnership relations in order to create a more attractive image of settlement and cottages, more colourful tourism attractions and high quality hospitality.

Conducting feasibility study

Conducting such a feasibility study that covers all the 27 settlements of the Zselica Action Group, its main component is creating product image of the settlements.

Village development service

Establishing a consulting service with village development functions providing trainings, personal consultancy and programs for the population of the action group, which transfers knowledge and contributes to a better access to information and provides professional assistance in to recognise the values and to realise them in specific products, to create quality service culture and to enhance the opportunities for alternative income earning opportunities.

Altogether 18 project proposals were submitted to the invitation for application, with a total amount of HUF 76,427,496 grant. This represented 99.9 per cent of the all available amount (HUF 76,500,000). One of the applicants receded due to the lack of own sources. Thus the total amount of approved grant was HUF 74.427.340, 97.3%. The rest of the projects was successfully implemented, and are in the course of the financial implementation. The main information on the implemented projects are summarised in Table 1.

Table 1. Main facts of the project run by Zselica Action Group

Title of application	Approved amount of grant by measures (HUF)	Implemented projects
X.1.1 – Improvement of information infrastructure – assignment of round tourist trips, printing brochures	**4,899,400**	Assignment of 3 LEADER tourist routes:
		I. Santos-Szentbalázs-Cserenfa-Hajmas-Kaposgyarmat-Galosfa-Boszenfa-Simonfa-Zselickislak-Zselicszentpál
		II. Kaposmero-Kaposújlak-Kaposszerdahely-Szenna-Patca-Zselickisfalud-Szilvasszentmárton
		III. Bardudvarnok-Kaposfo-Kisasszond-Kiskorpad-Gige-Jakó-Kadarkút-Mike-Hedrehely-Lad
		Brochure introducing 27 settlements, printed in number 30,000
X.1.2. Improvement of information infrastructure – placing stopping, information and knowledge transfer boards	**7,225,000**	Placing 2-2 information boards "Zselic Pearls" in 27 villages of Zselica Action Group, 3 tourist routes
X.1.3. Establishing resting areas	**19,045,273**	2-2 summer-houses of 9 m^2 in Simonfa, Galosfa, Hajmas, Szentbalazs, Santos,
		1-1 summer-house of 20m^2, with open-air desks and 2 litterbins in Boszenfa, Zselickislak, Zselicszentpal, Kaposgyarmat
		1 summer-house of 9m^2-es, 3 desks, 4 litterbins in Cserenfa
		Kaposújlak: summer-house of 20m^2, desk, bench, fire place.
		Banya: 4 summer-house of 9m^2, 2 fire places, 6 desks with benches, 10 litterbins.
		Wooden garden furniture (summer-house)
		Summer-house: Kaposszerdahely, Szenna, Patca, Szivasszentmarton, Zselickisfalud, Kaposújlak, Kaposmero
		Wooden snug (with seating-room for16 person)
		Resting areas along with tourist routes in the area of Zselica Action Group.
X.1.4. – Services of adventure cottages	**2,921,071**	Stood back from contract.
		Smith yard in Galosfa.
X.1.5. – Establishing student bases, renovation of older ones	**15,846,003**	Animal stroking yard in Szentbalazs.
		Renovation of Katica Tanya Active recreation centre. Walls, floors, furniture, lighting, switch, tap, selective waste management, pavement, car park.
		Student base, student hostel in Boszenfa, Dózsa Gyorgy str. 2.
		Student base, handcrafting house.
		Student basis of 200m^2.
X.1.6. Organising study trips	**3,499,800**	Study trips "Ideas study Tour" with 46-47 participants county Baranya, Zala, and Austria
X.1.7. Conducting feasibility study	**7,999,950**	Study on product images of villages in Zselic.
X.1.8 Village development service	**14,991,000**	"Zselic Light" village development service involving 27 settlements.
Total	**76,427,496**	

Source: Banya Panorama association, 2008.

The fundament of tourism development is attractive, clean environment. Summer-house and information signs, study bases contribute to the development of tourism in the area of the Action Group, because visitors will find their way easier, they can rest on the tours and have food and accommodation in tidy environment.

Experiences of the Zselica Action Group in the implementation

ARDOP Managing Authority called the proposal in June, year 2005. The first activity was the selection of Local Action Groups in two turns. In the course of the pre-selection, Local Action Groups were chosen, than in the second turn they submitted their programs in more details. The program needed to consider and suit the strategic and/or operative programmes. The high interest in the programme is shown by the high number of applications (186 all over the country). In the second turn, 108 Local Action Groups were approved.

The experiences of the Zselica Action Group gained in the implementation of the LEADER+ Programme were investigated in chronological order of the programming and the implementation periods.

In the programming period *the following experiences were gained.* In the beginning phase it was a positive experience that the invitation for applications allowed many own ideas to incorporate, but it was a negative experience that only two months were given for the Action Groups to found themselves and to submit their applications. Further problem was that besides actually completing the application, the ideas of the applicants needed to be harmonised in this period, as well.

For the completion and harmonisation of the rural development programme only a bit more than one month was given, which is not enough to complete a thorough programme. While in other earlier joined states of the EU approximately six months were given to complete the programmes.

The soundness of the programming period and the preparedness of the host organisation were reflected by that the Local Rural Development Programme contained only such actions that fit in the ideas of the local people; therefore, only such themes were announced that were applied for. In contrast to other Action Groups all the applicants of the Zselica Action Group won and the applied amount of money was not higher than the available. Uniquely enough, the programme managers saw the realising of the aims of the region not only in the "hard" investments, but they targeted the completion of a feasibility study for the future in terms of the preparations for the next LEADER period, which concerned 27 settlements of the Zselica Action Group with a main element of building the product image of the settlements.

The ***invitation for applications*** followed the programming period. In order to ensure the widest dissemination, information forums were held with the participation of more than 200 local people in five villages (Kaposszerdahely, Bardudvarnok, Szentbalazs, Banya, Szenna) where the inhabitants were informed about the LEADER Programme and the Rural Development Programme "Zselic Light" as well as on grant opportunities. The places and

dates of the forums were communicated on posters (200 pcs) placed in the settlements, in addition invitation letters were sent and 2000 pieces of two-sided fliers were distributed in the 27 settlements. Full information was available for the applicants on the Rural Development Programme on www.bpe.info.hu webpage.

In local papers relating articles and the call for proposals were also placed; and the local radio made a report on the LEADER+ Programme of Zselica Action Group and on applicable actions.

The success of the Programme was due not only to the preliminary information phase, but the continuous professional counselling, as well. This incorporated information regarding ARDOP LEADER+ Programme, full information on invitation of Zselica Action Group for applications, personal advising, guiding on the availability of application documents and on right filling in them and on the application procedure. The host organisation recorded both the personal and the telephone advising in costumer book. Due to the experiences gained earlier in the LEADER pilot project the host organisation adapted rapidly to the continuously changing frame, it adapted the new element quickly and handled the changes well.

It was a negative experience in this period that many terms changed in the course of the invitation for application thus the Action Group lost applicants, primarily from the entrepreneur sphere. As LEADER Programme basically aims economic development, the economic actors are one of the most concerned groups of importance. In case of business investments, however, the ratio of the grant changed from 65% to 45%. The 65% support rate was contradictory with both the national and the EU regulations; because if the intensity of the support is defined for a particular action at a lower rate by a particular programme, it cannot be higher in case of other programmes. The lower supporting intensity obviously decreased the activity of potential applicants; hence the same support rate was available in the operative programme for economic competitiveness (ECOP) with much less administrative work to do and preparations. The applicants were informed about the changes occurred in the application documents on the webpage of the Action Group, as well as they were contacted personally and by telephone.

In the course of the completion of the application the most important negative experience were the complicated documentation and the guide on filling in the application form which was not detailed enough and made the work of the applicants difficult. Many of the applicants felt complicated to interpret the different titles of application and the applicable costs. The reason for this was that the LEADER programme preferring otherwise flexibility, simplicity and transparency was incorporated in the ARDOP which has an extremely rigid legal and documentation framework. This significantly reduced the nature of LEADER.

As a negative of the Intermediate Body it must be mentioned that very often the applicants were not given adequate information and answer on their questions concerning the documentation and cost accounting, which was

seen in the full course of the application procedure. There were no responsible persons in the offices, and due to the frequent changes the officers – if they were available at all - were either not able to or did not dare to give exact information.

As many of the applicants of the Zselica Action Group took part in the earlier pilot project and other ARDOP tenders, the majority of them were not much challenged by the application procedure. Although for those who had no experiences at all, it was a tremendous work and life experience to complete this complex documentation. Thus, they will probably better off in the next LEADER period. It must be mentioned also that the host institute took a very active role in helping the applicants. The success of the applications of the Zselica Action Group was considerably due to that the host institute had a much higher number of experts who advised the applicants than other host institutes in the country.

In the first turn the project proposals were submitted to the host institute and it evaluated the form and content of it by from formal, entitlement, fitting and completeness aspects. After completion of the documents, the host organisation evaluated the project from professional and financial view-point according to a strict pre-defined system of aspects and scoring system. If the application did not reached 51% of the scores available in the nature of LEADER it was not supportable. After that, the Hungarian Agricultural and Rural Development Agency controlled, monitored and scored the applications; they found all things right in case of the Zselica Action Group, which can be considered as qualification of the Action Group.

Based on the scores, the host institute suggested the approval of the grant by the Local Reviewer and Monitoring Committee, which proposal was discussed and finally all of the proposed applications were approved.

The proposed applications approved by the Committee were transferred to the regional Division of the Agricultural and Rural Development Agency, according which the LEADER Department prepared a bid for the Decision Preparatory Committee, who made the final decision on the approval of the grants. As sometimes the titles of the submitted applications were not in accordance to that the local managing authority expected, opportunity for restructuring was allowed by the LEADER. Only in case of higher amount of grant than 20% of the total amount application for regrouping needed to be submitted. This was done by the Zselica Action Group, as well, for a minimal amount, the regrouping was allowed.

The decision on the approval or rejection of the grant was made by the Managing Authority based on the proposal of the Decision Preparatory Committee. After receiving the letter of approval, the applicants and the Hungarian Agricultural and Rural Development Agency made a contract on the grant.

Following the contracting the implementation of the projects started. We need to mention here that it caused anxiousness for the applicants that it took more than half a year from submitting to contracting. After submitting the report on financial data, the grant beneficiaries were sent a letter of admission.

The amount of grant should have been paid off within 60 days from this letter. However, very often the period between the submission of the accounting and the distribution of the admission letter was more than two-three months.

In case of Zselica Action Group, serious problem did not occur in the course of the implementation of the projects. The Agricultural and Rural Development Agency flexibly ensured contract amendments, while the host organisation supplied the applicants with all of the information necessary for rapid adjustments and completions of the documents. Unfortunately, the authorities could not keep the legal deadlines in some cases. This caused problem for the applicants primarily when they needed to borrow money from banks in order for the implementation of the project. There were negative experiences regarding the monitoring of the implemented projects, as well; sometimes the beneficiaries of the grants found the methods excessive or unnecessary, and the inadequate knowledge on rural development was also a problem (lack of professional in the agency).

It was a positive experience that as the continuation of the pilot programme the cooperation among several settlements initiated bottom-up-wise has enhanced; innovative ideas have been implemented by the cooperation of local people. The implemented projects contributed to the life standard on the settlements and improved the community life.

Conclusions

The ARDOP LEADER+ programme supports Local Rural Development Programmes based on local partnerships. The Action Groups are responsible for the completion of the Local Rural Development Programme and to keep the local application system in work in order to realise the programme objectives. All of the approved projects need to contribute the realisation of the overall objectives of the group so as it is stipulated in the Local Rural Development Programme. The implemented projects may positively influence the social, economic and environmental sustainability of the region. It is unique in LEADER that the integrated rural development program defined by the community of rural areas is implemented on a wide basis of local partnerships. This new model of rural development is available for everyone due to the LEADER network. LEADER+ enhances human, public and economic structures that are able to mobilise the inner resources of particular areas. In such a way, development becomes sustainable and such human, economic and information links will be built that are absent today.

A Local Action Group is formed by various social and economic actors of the region, local people, local enterprises, social and civil organisations and municipalities, where the basis of the cooperation is partnership. As regards the spatial-specific aspects, the plight analysis considers tourism as break out point in the settlements of Zselic. Summarising, the LEADER+ applications were successful, and the aims defined by the "ZSELIC LIGHT" Local Rural Development Programme were achieved. By improving the information system, establishing resting areas, improving the services of advantage

cottages, establishing student bases as well as renovating the older ones contributed to the economic and tourism related utilisation of natural values and cultural heritance. It is important for the future that all settlements have printed brochures on their attractions and programs, based on them a suitable marketing could help a wide introduction of these settlements and thus the improvement of tourism in the sub-region.

Organisation of study tours allowed for introducing Hungarian and foreign model projects; while the ensured village development service enhanced village communities, improved human resources and contributed to networking. In the course of the completion of the application the most important negative experience was the complicated documentation and the guide on filling in the application form which was not detailed enough. It was made even more complicated by frequent modifications, delays of pay offs, and the lack of professionals on rural development in the agency. Due to the tireless work of the colleagues of the host institution, however, the applicants got through the problems easily.

It must be emphasised that the LEADER+ programme involved only a small part of the population, the real breakthrough is expected from the 2007-2013 programme period, where the financial sources will be multiplied, thus the opportunities for the local people will significantly improve. The preparatory works have begun for the LEADER Programme period between 2007 and 2013 in the region; in first turn municipalities and mayors then also the civil organisations and economic actors have been contacted already. As a result of this, the Local Community "Zselic Lamps" were founded with 150 members on the 6th of December in 2007. On 17th December, the Rural Development Association "Zselic Lamps" was founded, which will be responsible for the execution of the measures of the 3rd and 4th axes of the New Hungary Rural Development Programme in the 48 involved settlements.

LEADER+ Programme brought numerous new experiences for the civil organisations, enterprises and local governments acting on the area of the Zselica Action Group. A new approach, a different way of thinking was adapted by the area. By grabbing the opportunities given by bottom-up initiatives, by utilising the power of partnership the region made a step on the route of development. The beneficiaries faced many challenges between the period from planning their projects to closing them, thus they must have gained tremendous experiences in applying, implementing and accounting EU funds. Finally, LEADER+ programme had an overall positive effect on the area.

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CHANGES IN THE AGRARIAN POLICY THE ROLE OF PRODUCTION SYSTEMS IN THE EVOLUTION OF THE HUNGARIAN AGRICULTURE BETWEEN 1960 AND 1990

ANDRÁS SCHLETT

Introduction

Hungarian agriculture expanded its emission fast in the sixties and seventies. Between 1961 and 1978 Hungary was surpassed in the increase of gross agricultural production value only by the Netherlands. Moreover Hungary took the first place in agricultural production value per head[5]. Agricultural development speeded up especially after 1967. The agricultural production value between 1960/62 and 1983/85 nearly doubled. In case of cereal production per head Hungary was on a par with the USA, and it was only passed by Canada and Denmark, while in case of meat production per head Hungary stood second in the world after the Netherlands. On the other hand, however, because of the growth of capital intensity net production of the agriculture at the same time increased only by 20 per cent in relative comparative prices of 1981.[6] (ROMÁNY, 1998.)

The potential of Hungarian agricultural production was also significant in international relations. The average production of wheat and corn matched the French, the Danish, the American or Canadian outcome, and meat production was also among the best in the world (KSH, 1985).

The aim of the essay is to demonstrate the characteristics of industrial like productive systems gaining ground in the Hungarian agriculture from the beginning of the sixties. In course of this the article concentrates upon the emphasis and analysis of those factors which determined the offset and development of the new production organising form in special way. It presents what role industrialising played in the evolution, successes and failures of the given development models, and what agent role it played in the enterprise system established in the sixties and seventies and in the organization of different integration forms. In the end the history of industry like agriculture, - as an outbreak attempt – can partly give an answer to the deeper correspondences of the operational problems of the socialist economic system.

Materials and methods

This historical-economic discipline needs wide, complex social scientific, moreover mechanical overlook, so in terms of the topic technical history (introducing and the effects of new means of production, technologies) played great role. Comparative studies as a historical comparing method was essential

[5] In this it also played a great role that in Hungary the density of population is smaller than in other agrarian countries.

[6] Meanwhile the employed manpower diminished significantly.

during the research, because the great volume of sources without employing comparative method is unusable. In terms of the comparative method first of all quantification was important. It was a difficulty that the available data are from more sources having different aims, so the adapted methodology to count this is often different.

The main aim is to demonstrate the specific and dominant elements of the mechanical development of social agriculture, such as:

- The spreading of mechanical energy and mechanical machines
- The development of plant improvement (first of all hybridization)
- Artificial fertilization, cross-breeding in live-stock farming
- More perfect soil-ameliorating improvements
- Introduction of constructional improvements

Achievements

In agriculture beside the policy aiming the improvement of the standard of living and the effectiveness of the production, the second aim closely related to the former was to justify the legitimacy of the big farms, its more developed state. Till the beginning of the sixties as a consequence of collectivization agricultural production reduced with 10 per cent at the same time. It was obvious that considerable development, the provision of the supply, the growth of the standard of living among new conditions could be carried out only by total technological reconstruction.

Live-stock farming

Socialist ideology tried to change the producing proportions, push forward the segments having higher efficiency, and raise the output rapidly in agriculture. Before the poultry-farming programme Hungarian agrarian experts were informed by international data and foreign literature about the rapid industrialisation of the poultry meat and egg production in the developed countries, in consequence of which this sector guaranteed the largest crowd, most equal quality and cheapest meat production within the briefest period. As a consequence of the great prolificacy of the poultries the rotation of the production is also quick, so it was appropriate for producing great mass of meat year by year. Its adaptation ability was remarkably wide and coped with every phase of the professional production. So in case of poultry meat and egg production the economic and political profile became compatible with each other.

The opening to west of the Hungarian agriculture was also connected to this sector. Egg production started in 1962 with Lohmann-type poultries imported from West-Germany. Then they organized the building of poultry stables within the farm, which were built in construction appropriate for the close production system. With the cut off of the elements of natural environment and with the industrial type portioning it became possible to measure and regulate all producing factors in all time. They created strict

harmony among farming, propagation, incubation, raising, settling and slaughtering. The activities of all factories was organized according to a closely connected programme.

As a consequence of the significant domestic supply and the relatively cheap price domestic poultry meat and egg consumption sky-rocketed, and in 1985 Hungary was ranked among the first five countries in the world screened per head. The production made a significant export possible. The most progressive role was played by poultry-farming in the Hungarian large-scale live-stock farming till the end of the examined period, and in its level it became the closest to the leading countries in production.

In the field of large-scale pig breeding they wanted to reach competitiveness with creating large-scale conditions similar to the poultry. In the beginning of the programme pig farms operating on the closed technological principle already existed in the developed capital countries, but their proportion was smaller than the capacity of the farms built in Hungary (with an issue of generally 600-700 sows, 9-12 thousand porkers). The production with a new method –although this started on wide research-developing and producing base and by which they used numerous foreign experience and innovating results- remained problematic till the end. In course of the planned investments they often overdrew the financial budget with 40-60 per cent. The buildings and the new farming technology did not fit to the nature of the animals. The production proved to be more material- and energy-demanding than the planned, that is why most farms could not realize the nominal emission.

By introducing the system the main fault was that during the carry out they copied the poultry-farming programme mechanically. It turned out that they cannot take over everything from the poultry-farming, because the most difficult part of the process, the incubation was good to solve by poultries, but at the same time the early phase caused numerous further problems by pigs.

The failure of the programme is shown by the fact that we could not manage to join forces with the international leading group with the farming and the producing results, and meat quality also fell behind eg. the Danish and Dutch standards. The losses caused by death and the so-called technological rejects were remarkably high (from 100 only 68-71 reached the slaughterhouse). National spread of the professional farming and stabilization of the results on internationally week middle level resulted in the most potential loss of Hungarian agriculture.

The industrialisation of the sheep-farm ended with a spectacular failure, as it was less compatible with the biological capacities of the animals. By industrialising the production the farming on closed tread grating caused foot problems and get lame within a short time, so the animals were later fattened within traditional circumstances but with intensive fodder supplement.

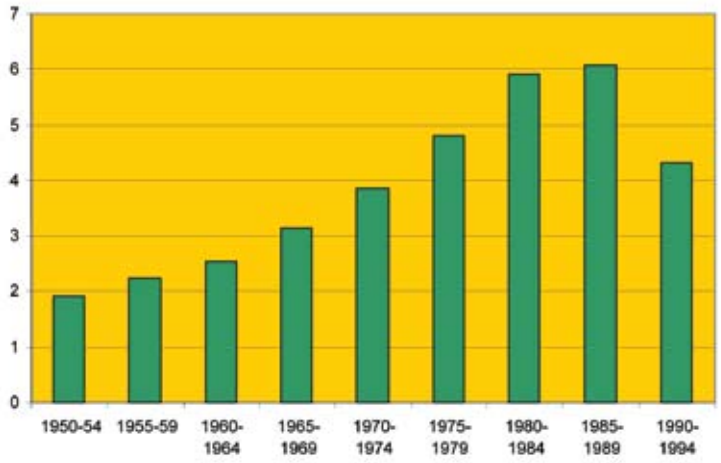
Cultivation of plants

The closed system of the professional commodity production was firstly developed in the production of poultry products, despite the fact that hybridization as the main incentive was taken over by the poultry farmers from corn growing. Corn came to the centre of the interest of experts examining the possibilities of intensive, professional production already in the sixties. Among the cereals this plant has the greatest productivity, and it contains the most energy in a unit quantity, and because of these two attributes it was the most appropriate for the realisation of the aims of corn and meat programme announced by the upper leaders. In Hungary different researches took place already from the beginning of the sixties. They examined the possibilities of increasing the yield, the question of one-crop cultivation all-round, made experiments as concerning variety-comparing and artificial fertilizer and looked into the effects of different weed-killers and machines of different foreign companies.

The operation of the corn production systems were allowed by the Agricultural and Commissariat Ministry in 1971. They used foreign exchange constructional credit form in the import of the necessary production lines. According to this they had to create the conditions of the development of corn growing with the export of a part of the surplus crop. The CPS (Corn Production System) started its operation basically with capital machine system, although later they managed to substitute some machine type for some produced in Hungary. They used the technological system of CPS in 1972 on 60 000 hectares, in 1973 on 124 000 hectares. The centre of the system was the Bábolna State Farm in the first year. The result of corn production sky-rocketed, so it became necessary to create a separate company. On 30th March 1973 the Bábolna Corn Producing Mutual Company CPS was born. (SCHLETT, 2007.)

In Hungary corn became the primary plant of the production systems of cultivation of plough-land plants. Its main attribute which made it appropriate for this was the good monoculture-patience. The average yield increased by 25 per cent per hectares from 1970 till 1980 (see Figure 1). Besides creating fodder base the technical and organizational causes also played a role in that production systems got one-crop nature. Experiences, however, showed that within a relatively short time monoculture resulted in problems of different nature, whose neutralisation required considerable material sacrifices. Such were the unfavourable physical-chemical and biological alteration of the soil. A lot of problems arouse eg. the harsh spread of some resistant weeds connected to certain monoculture, and the accumulation of chemicals. The cut of the optimal time meant further disadvantage in the production during the yearly work.

Figure 1. The set of average yield of corn (t/he)



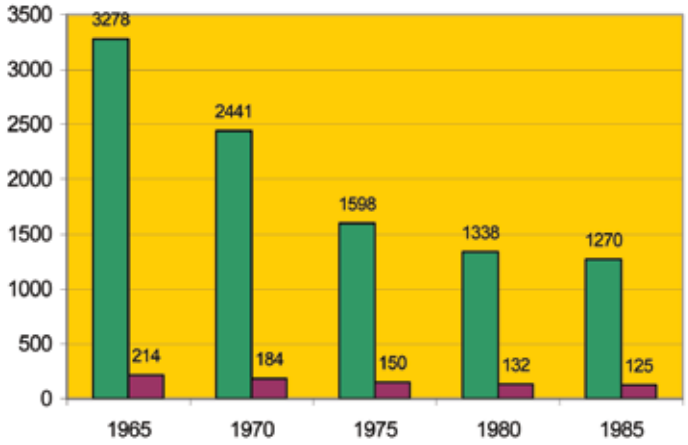
Source: SZÁSZ K. (1995) p. 893

Concentration

In the seventies huge company unifications took place in the agriculture. Between 1970 and 1979 the number of state farms reduced from 184 to 131 (see Figure 2), its average area, however, increased from 5 548 hectares to 7 598 hectares. (CSIZMADIA, 1981.) Combinations were also organized. In case of combinations main profile activities were not confined to the single sections of agricultural production. They clasped the former separated sections of the output, such as fabrication of the means of production, the production of the primary materials, processing and sale of the agricultural stock and validated these in the same enterprise domain. This company organisation so evolved and set up had to undertake the complex development in its field of activity as well. This could be reached with development work using wider-range research and academic achievements, intense concentration of the production and partner relationships. (KLENCZNER, 1982. p. 123)

In Hungary great agricultural companies evolved never seen before, whose production value matched also with the industrial corporations. Inside the economies more vast sectors evolved and industrial and accessory activities also joined the agricultural production. Almost one-third of the activities of every big farm did not banter close to agricultural production. Agricultural corporations and the first combinations in it evolved in the beginning of the seventies in Bábolna, Agárd, Bóly and Mezőhegyes. The combinations and state farms integrated more and more lands, gave rise to enormous production volumes, developing either agriculture or food industry and different industrial activities. They played great role in the evolution of productive systems. They provided the widespread of up-to-date techniques and technology through the production systems coming into existence.

Figure 2. Changes in the number of co-operatives and state farms



Source: CSETE L. (1985)

In agriculture the integrating activity of the big farms became a characteristic developmental direction beside the centralisation process. The rise of the company size was changed with horizontal and vertical relations. New type co-operation forms were created and the process of production concentration and specialisation got new content. In agriculture enterprise systems came into being with lot of functions and rich profile. In the scope of the company supra-company type of organizations (systems, associations) were formed.

The existence of production innovation assumed changes in the factory organisation, and this went together with the spread of different associative forms in agriculture. These had significant task in the development of the technical-technological innovation. The role of the system centre as innovation centre was based on the genetic, technical-technological and farming complex system, where research development activity had more and more role. The most characteristic feature of the co-operating process was that certain previous company functions were often separated from the frames of the company and found employment on other organizational level of the integration. The production systems represented technological and organizational innovation and most of them operated as an organisation spreading innovation.

Conclusions

In Hungary successful change of the production profile served as the basis of success. Among its conditions they found important to create the human, spiritual conditions, the victory of the affected over the material and political support. As the logic of internal and external planning differed, it meant advantage that in fields of poultry-farming their value judgement agreed, so its end-product proved to be well-saleable in world market. The success of the programme lead further strengthening of the belief of "positive effect of size profitability" and put the stamp on to the reconstruction of the sector proportions of production and agriculture. As the "forced" big enterprise frame not adjusting to the type of the activity in many cases was not effective, the reconstruction in such ways went with many disadvantages. The one-crop corn growing, the ecological conditions, the basic century-old agrarian technological rules, the compensation of the negative effects with chemicals necessarily increased the industrial dependence of the agricultural production, increased their costs with the rise of the industrial prices and started a deteriorate process by soil. Another time because of the characteristics of the products the advantage of the great organisation, the closed technological systems, the specialization could not succeed, eg. in the case of sheep-farm.

Special attention was paid to the mechanical improving activity. They particularly dealt with this sphere. Mechanical development was related mainly to buying western licences and know-how, which they developed on. The relations with western companies had an important role till the end. The purchase and use of developed western technique also helped the change of production profile and rise of educational standard of the workers (the training of the workers often went parallel with the installation of new machines) but often the improvement of quality. Development of the Hungarian agriculture in the second half of the XXth century can be characterised with the apace rise of direct (fuel) and indirect (chemical fertilizer, pesticide, machine etc.) energy input. The proportion of the materials having industrial origin in the total materials utilization of the agriculture was evanescent in the beginning of the sixties but it came near 60 per cent in the middle of the eighties (see Table 1). This was also followed by the revolution of the land structure, concentration, centralization, advancement of size and with this also a drastic reduction of diversity, and variegation. (VARGA, 2000.)

While the growth conditions in the sixties can be characterised with the existence and accumulation of the production factors being at the command relatively at a low price and abundantly, the flare of international relations and broadening of the markets due to this, the changes of the world economy in the seventies and eighties exaggerated and revealed the vulnerability of the allocation systems. (BEKKER, 1995. p. 147)

Table 1. Input-output price index (per cent)

	Index (1980/1975)	Index (1988/1980)
Procurement price of agrarian products	124,4	135,8
Price of means of production with industrial origin	145,8	149,8

Source: SZABÓNÉ M. ÉVA (1991) p. 38.

The industry like production and technology configured in the large-scale agriculture proved to be a method firmly claiming energy and industrial material. This also contributed to the fact that producer utilization increased more rapidly than gross production so the proportion of net agricultural production – and its value as well – decreased. (KLENCZNER, 1982. p. 28) The effectiveness of the investments used in order to expand agricultural production became more and more hard. Contrary to this greater efficiency demand did not appear in the arrangements of economic policy, while the constraining effect of the restoration of the trim prevailed.

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EXAMINATION OF TERRITORIAL DIFFERENCES THROUGH THE EXAMPLE OF THE SEVEN STATISTIC REGIONS

IVETT SZÉLES- ZSOLT BARANYAI-MÓNIKA URBÁNNÉ MALOMSOKI

Introduction

The examination of territorial differences has a past of more decades. The EEC had already committed itself to reduce the differences among regions by the Roman Contract. The real battle began only at the beginning of the 1970's when the leaders of the Community countries started to worry about the fact that the regional differences among and inside their countries would prevent the strengthening of integration.

The demand for fighting the territorial differences was getting stronger in the 1980's, because a high rate of unemployment was expected in most of the European countries, which meant a basis for new researches. In our country the researches and experts started to deal with the reasons of more and less serious territorial differences at the beginning of the 1990's when our economy system changed. The economic and social change proceeds differently in time and space. The result of this fact is that there is a significant difference among regions, which is demonstrated by the indexes of more important improvement factors (GDP, Gross Added Value, unemployment rate, net salary, investments... etc.)

Several factors give special actuality to regional researches nowadays – mainly in connection with the European Union. The social-economic change after the system change brought the tension among the different regions of the country to light even more remarkably. The differences of advanced state among regions were clearly marked and contrary to our declared aims they became stronger (MARSELEK et al., 2005).

Geographical location, infra-structural conditions, the settlement's environment and the quality of workforce are all competitiveness factors. The knowledge-based economy is also spreading in the developed countries. The presence of special knowledge is an important competitiveness factor, because it cannot be copied easily. While examining the years after the change of regime it can be stated that the difference in the development of different areas of the examined countries has not shrunk since the change of regime deepened the differences that had already existed (KÁPOSZTA-NAGY, 2003).

Materials and methods

It can be generally stated that the territorial differences of the examined social-economic phenomena are multi-dimensional, so they have a so-called basic index. We tried to collect those indexes which describe the economic situation of each region well. It was a very important criterion that they should be at present in every region, they should be well-structured, and they should

be useful to create complex indexes. The data that we used during our research are from the data-base of Eurostat. The reason of our research were that the reduction of the regional and territorial differences in the EU is more and more important in Hungary as well, which means a long-term procedure. The thesis of the research is that the rate of the dominant economic sector (primary, secondary or tercially) highly influences the economic development of a region. The economic development is higher in a region where the rate of tercial sector is dominant on the basis of GDP per capita. The most well known comprehensive index reflecting the effects of several factors at the same time is the Gross Domestic Product. GDP has been used to compare the developments of individual countries for long, but its application for regions only started in the past few years. However it must be emphasized that GDP is not the only index for economic development, so it must not be declared as the only index for counties and regions, but it is recommended to apply other statistical indices also in territorial analyses (PUKLI, 2000).

Production and employment factors are also significant beside settlement and economic structure in the territorial differences. The higher the production level of a region (GDP/employee) and employment rate, the better the GDP value per capita. But the effect of these two factors is felt differently in the regions (HORVÁTH, 2004). NAGY-KÁPOSZTA (2006) mentioned in their study that the EU measures the income of regions with GDP per capita in NUTS-2 level regions. In the concept of uniform competitiveness the two major factors are the relatively high income (measured by GDP) and the relatively high level of employment (shown by employment rate). The GDP per capita can be divided into three multiplier factors:

GDP/population = *GDP/employed * employed/people able to work * people able to work/population*

On the basis of this relation we set up the following model, which we used for examining the regions during our research.

$$\frac{y}{IH} = \frac{y}{L} \times \frac{L}{EA} \times \frac{EA}{IH}$$

IH = all the population of the region
EA = economically active population
y = produced income (in this case the Gross Added Value)
L = using of manpower per year (in this case the number of employed people)

Consequently, $y*IH^{-1}$ refers to the development and welfare of the given region, while $y*L^{-1}$ expresses the income production of the employed (GDP production). The $L*EA^{-1}$ shows the employment rate, in other words how the given region uses its manpower sources. The last factor depends on the

circumstances of a region, that is how many people can be counted as economically active.

$y*L^{-1}$ is especially important from the relation, so it was a subject of other examinations in my study considering how productiveness appears in the sectors of the regions. The factor is an economic productiveness index which expresses the productiveness of human reinforcement. This productivity index can be divided into an investment/work and letting out/production capacity factor as follows:

$$\frac{y}{L} = \frac{K}{L} \times \frac{y}{K}$$

K = the amount of secured investment (in this case the gross secured investment)
y = produced income (in this case the Gross Added Value)
L = using of manpower per year (in this case the number of employed people)

On the basis of this $K*L^{-1}$ (EUR/employed) means equipment capacity and directly refers to the rate of used investment and work. $y*K^{-1}$ (EUR/EUR) describes the production capacity of materials (more exactly the secured investment). From another point of view it is an investment effectiveness index.

Results and their analysis

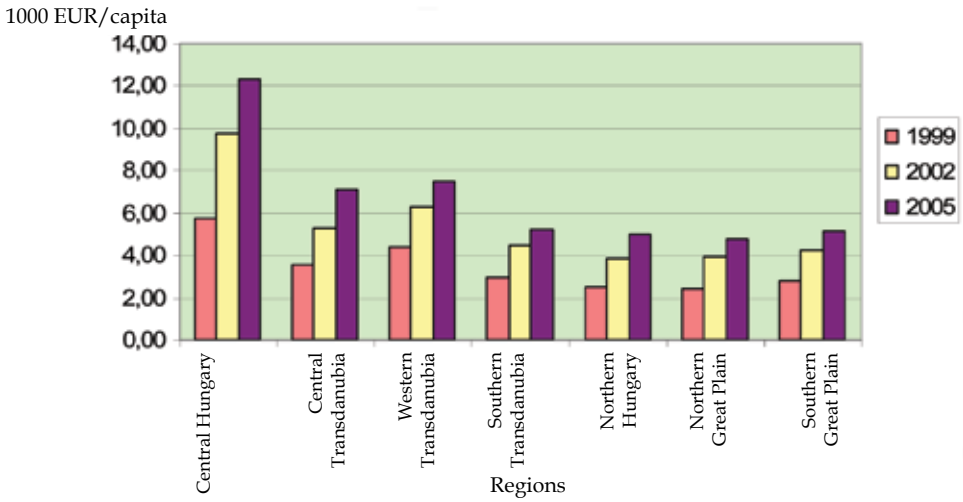
Three years were considered as the basis of the research, since there was not a full database available, so we studied year 1999, 2002, and 2005 in the views of different indexes.

The analysis of productivity in the seven statistic region on the basis of the population of these regions

It can be seen on the figures that the given regions went through a positive change during the years. The growth of development and productivity are clearly expressed. The Hungarian productivity (GDP) has doubled between 1999 and 2005. If we analyse the figures regionally, we can see that the measure of development is almost equal among regions, but we must add that the more developed regions can reach more development, and this way they produce better (KÁPOSZTA-NAGY-ÖKRÖS, 2008).

In Figure 1 we can see the full productivity, development and welfare of the regions, which is determined by several factors: the income production of the employed; the employment rate, i.e. how a region uses its human reinforcement; and given circumstances as how much is the economically active rate of the population.

Figure 1. GDP per person of regions



Source: Own composition based on Eurostat data

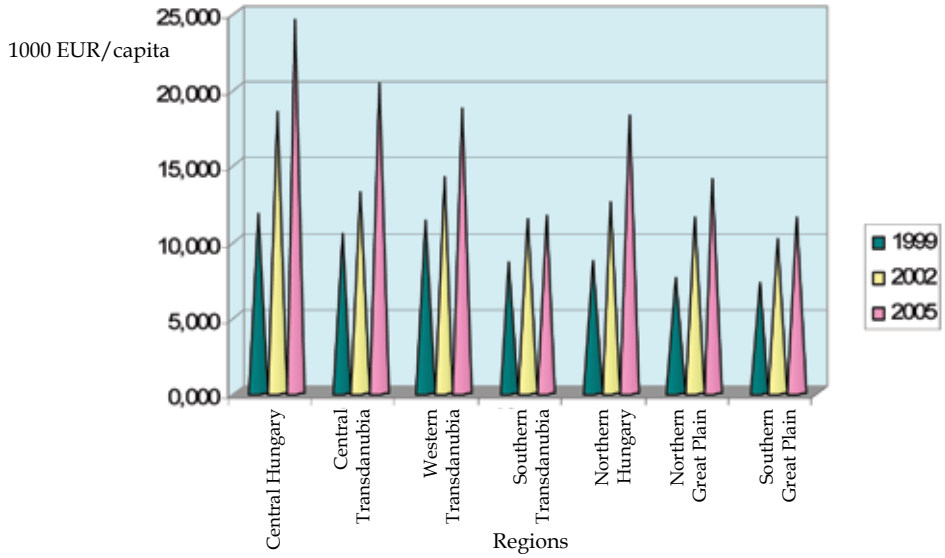
Sector GDP production analysis of the seven regions on the basis of the number of the employed

It can be generally stated that the regions dominated by agriculture – as Northern Great Plain, Southern Great Plain and Southern Transdanubia – are not able to reach such a development measure (and production) as the regions which have a central core. These cores can be bigger towns where every possibility is given for the competitive production and economic growth. There are circumstances like natural, logistic, equipment conditions, which determine the competitiveness of a given region on the Hungarian and the European markets as well.

From 2000 the differences among regions became more significant. We can see the territorial setting of the most and least developed regions. In the most developed one the service sector produces most of the Gross Added Value while the least developed one is dominated by agriculture. Agriculture played a great role especially in the plain Hungarian regions. In these regions the number of the employed in agriculture is usually higher.

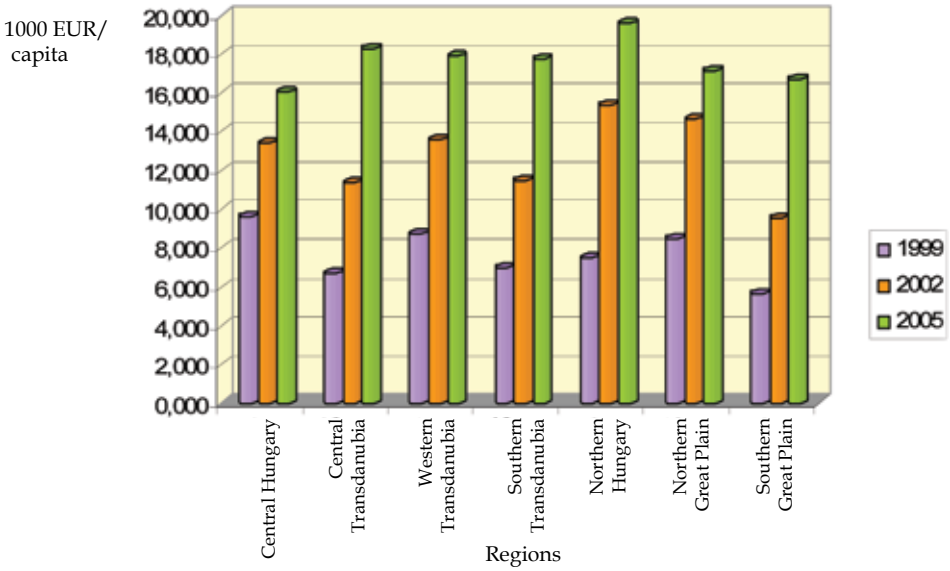
Figure 3 shows the industrial income production during the three analysed years referring to the seven regions. We can see that the number of the employed in secondary sector increased considering Euro/capita in every region, especially which have industrial infrastructure (Central Hungary, Central Transdanubia, Western Transdanubia) (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

Figure 2. GDP production of employments in primer sector



Source: Own composition based on Eurostat data

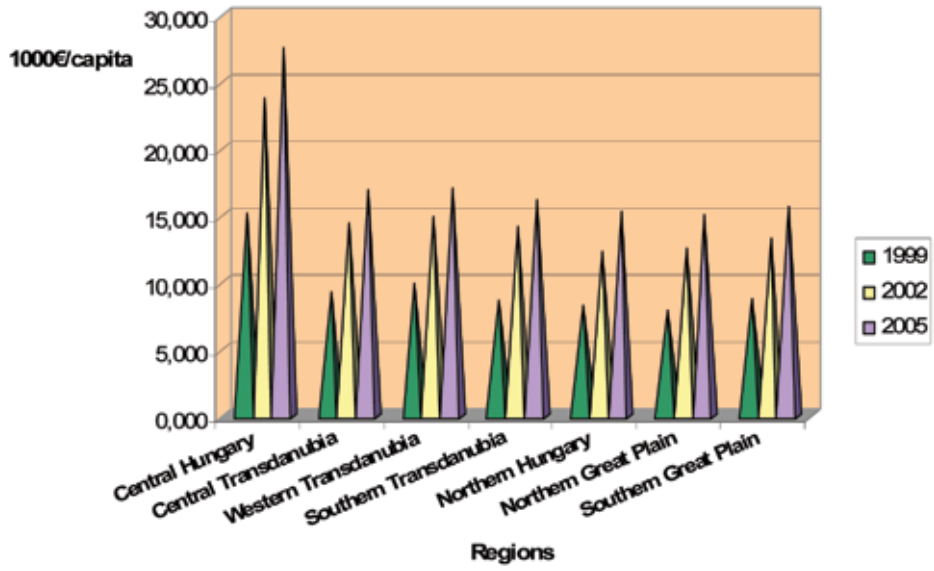
Figure 3. GDP production of employments in secondary sector



Source: Own composition based on Eurostat data

The higher the level of industrial development in a region, the better result it is able to reach. Two thirds of the industrial Gross Added Value was produced by three regions: Central Hungary, Central Transdanubia and Western Transdanubia. The least industrial production can be found in Southern Transdanubia and Southern Great Plain regions. Considering territorial relation, the industrial regions are rich, the GDP/capita is relatively higher. This is the result of a successful industrial structure change. Due to the favourable geographic situation, the high level of urbanization and infrastructure they are able to attract investors and funds. From the 1990's the role of services is becoming more and more important mentioning trade, tourism, logistics, economic and public service. At the same time the marketing possibilities are considerably unused. Consequently, the tercial sector should be strengthened to inspire modernization and to create better competitiveness. Figure 4 shows as well that the tercial sector is the strongest in the richest region of Hungary, i.e. Central Hungary. In this region most of the employed people have jobs in the tercial sector. The differences of productiveness grew among the Hungarian regions because of the arrangements for the regional close-up and the programmes that were made for strengthening competitiveness.The growth of development level depends on the modernization of the activity structure in the economy.

Figure 4. GDP production of employment in tercier sector



Source: Own composition based on Eurostat data

Regional differences need interaction only if there are unequal chances, i.e. people in the given region live in worse conditions for a long term considering standard of living, career and other types of chances (SARUDI, 2003). The differences among regions can be originated in several reasons regarding economic development and results. The natural profusion of a given region, the meeting points of trade roads, the amount of consumers, the outstanding sights of nature, culture or heritage and other reasons all can result in spectacular development. The presence of innovative and qualified manpower can also cause quick improvement, which inspires creating new companies (MARSELEK–PUMMER, 2003). Judging regional differences we must not forget that their liquidation or abolition is not possible. Regional politics is capable of decreasing some elements of these differences, but the effects occur in long term, so the interactions are never spectacular (LENGYEL–RECHNITZER, 2004).

Discussion

All things considered it can be stated that there are significant differences in development among the seven statistic regions. The economic productivity index is a good sign, which expresses the productivity of human reinforcement and it is an investment effectiveness index as well, because it describes the income productive capacity coming from funds and equipment. The situation of a region is highly determined by the quality of manpower. The presence of qualified, orderly and innovative manpower inspires the settlement of factories, companies, which accelerates the development of regions. The industrial production of our country is determined by three regions (Central-Hungary, Central-Transdanubia and Western-Transdanubia), while the agricultural production is determined mainly by two regions (Northern Great Plain and Southern Great Plain). Central-Hungary has an enormous role in the industrial production and services, which causes harmful distortions. The continuous close-up of rural regions is the keystone of harmonic regional development. The government regards moderating the negative phenomenon (unemployment, income differences, migration) in the regions as a main assignment and its aim is to abolish the barriers of extending economic activities for development. The regional study does not see the real possibility to abolish the differences of development quickly, because some elements of them can be decreased but the significant results can occur only after a long-time.

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THE ASSESSMENTS OF ECONOMICAL SUBSYSTEMS FOR IMPROVING THE POTENTIAL OF THE HUNGARY'S ECONOMICAL COMPETITIVENESS

KITTI KOLLÁR-PÁL GODA-TAMÁS SIKOS T.

Introduction

According to the international references the spatial examination of the economy's effects and the competitiveness are in close connection. The examinations of competitiveness mainly concentrate on country models and it is infrequent to find micro-regional models. During the current EU programming period (2007-2013) the EU focuses on the impacts of the competitiveness. According to the competitiveness the cohesion and the integration of the less developed areas have to be relevant topics, otherwise it is impossible to create sustainable competitiveness in the European Union. In our opinion the reinforce of the regional development is crucial requirement in all around the Europe Union. Since the regional development increases the potential of the EU's economy.

Due to the globalisation, numerous economic problems have appeared in Hungary as well. That is the reason of the importance of Hungary's competitiveness in the integrated Europe and also in Central Europe. The following markers can be observed: prices, incomes and tax systems. These markers interact to each other and these elements together and their interactions characterize the Hungarian competitiveness.

Domestic competitiveness

Hungary is being converted into to a bigger territorial, economical, cultural and political system the assist of the globalization and the European Union. In this larger conglomeration the opportunities of the regions, territories and settlements are determined by their competitiveness. The competitiveness regions are able to generate thriving economy, low unemployment rate, sustainable development and renewable capability (LENGYEL, 2003). According to the definition by the OTK (Conception of the Country Spatial Development)

The spatial competitiveness is more than the enterprises' competitiveness of an area. The spatial competitiveness contains the area could be attractive and pleasant for the inhabitants, for the tourism and for the investments as well. First of all it is able to organize and keep the regional functions (TÓTH, 2008).

The resource-attractive and conservation ability, effective regional structure is necessary for the spatial development growth. The competitiveness of regions and territories could be described with not just enterprise's competitiveness, but the success of the citizens, institutions and NGO's. Territorial

aligned development and express of the functional environment (for example site, informatics and traffic availability, financial and advisory services, suitable labor force) necessary for the repairing of the enterprise's competitiveness. These elements are not independent from each other. To keep the population and attract new ones the career opportunities are not enough it is also important to create stable life stile livable environment and high quality services.

Successful management is necessary to apply to the development founds and this management has to be able to create and generate competitiveness projects. The key of the competitiveness is the collaboration of the actors in a region or territory (ZSARNÓCZAI, ZBIDA, FREY, 2008). That is the reason why the inspiration territorial based on economical cooperation is essential for example the cooperation of research institutions, multinational companies, the sector of SME's and consultant agencies.

The relation between competitiveness and innovation

The growth of the economy and its success process is characterized by the innovation. The innovation could place truly the local economy and the enterprises into the dynamic circumstances. The notion of innovation was establish in the economics by Schumpeter. By his theory the new combination of the production factor demonstrates the fundament of the innovation and the enterprises are the special representatives of this intention. The Schumpeterian approach concentrates on the production sector but it can be extended for the other sector of the economy as well. His theory is the base all of the researches and thesis which are concentrated on the topic of innovation. Schumpeter characterized five diverse basic case of innovation:

- new product, new goods or a new value added resource
- implementation of a new production or distribution technology
- new storage or market place
- obstruction of new resources
- establish new organizations

The process of innovation has three main part by Schumpeter:

- Invention: born of a new idea thought
- Innovation: materialization of the new idea or thought
- Diffusion: the spread of the new idea, mass consumption

The different types of innovation generate different progressions in the spatial economy.

Diamond model

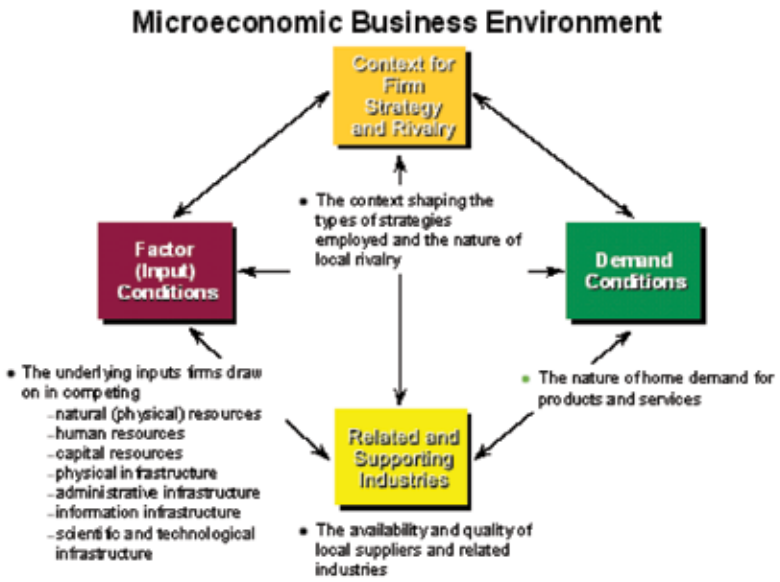
Michel Porter as the member of the Competitiveness Commission has started to concentrated on the competitiveness in the beginning of the 1980th. In 1985 he began his monumental empirical/ qualitative research about 10 countries' more than 100 industries. He was seeking the answer of the

next question: "How does the geographical location of the firms affect the competitive advantages and what is the strategy of the firms to find out the best site?" The results of the research titled "*Competitive Advantage of Nations*" were published in 1990. The determinative factors of the competitiveness are described in the diamond model. Four attributes of a nation comprise Porter's "Diamond" of national advantage.

They are:

- factor conditions (i.e. the nation's position in factors of production, such as skilled labour and infrastructure),
- demand conditions (i.e. sophisticated customers in home market),
- related and supporting industries, and
- firm strategy, structure and rivalry (i.e. conditions for organization of companies, and the nature of domestic rivalry).

Figure 1.



Source: www.rotman.utoronto.ca

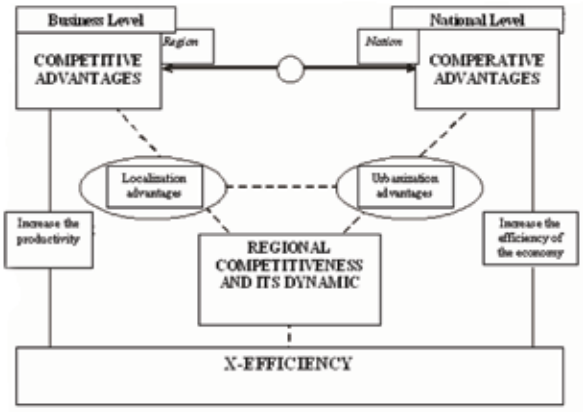
To characterize the competitive edge, the model prefers to apply the competitive advantages than the comparative advantages. The diamond model by Porter clusters for four determinant clusters in a region the parameters of the microeconomic business environment of the dominant industries' permanent competitive edge. The points on the diamond constitute a system and are self-reinforcing. Domestic rivalry for final goods stimulates the emergence of an industry that provides specialized intermediate goods. Keen domestic competition leads to more sophisticated consumers who come to expect upgrading and innovation. The diamond promotes clustering. Porter

provides a somewhat detailed example to illustrate the system. He emphasizes the role of chance in the model. Random events can either benefit or harm a firm's competitive position. These can be anything like major technological breakthroughs or inventions, acts of war and destruction, or dramatic shifts in exchange rates. One might wonder how agglomeration becomes self-reinforcing.

When there is a large industry presence in an area, it will increase the supply of specific factors since they will tend to get higher returns and less risk of losing employment. At the same time, upstream firms will invest in the area. They will also wish to save on transport costs, tariffs, inter-firm communication costs, inventories, etc. At the same time, downstream firms will also invest in the area. This causes additional savings of the type listed before. Finally, attracted by the good set of specific factors, upstream and downstream firms, producers in related industries will also invest. This will trigger subsequent rounds of investment.

X-efficiency: In economics, x-efficiency is the effectiveness with which a given set of inputs are used to produce outputs. If a firm is producing the maximum output it can, given the resources it employs, such as men and machinery, and the best technology available, it is said to be x-efficient. x-inefficiency occurs when x-efficiency is not achieved. The concept of x-efficiency was introduced by Harvey Leibenstein. In the theory of perfect competition, there will in general be no x-inefficiency because if any firm is less efficient than the others it will not make sufficient profits to stay in business in the long term. However, with other market forms such as monopoly it may be possible for x-inefficiency to persist, because the lack of competition makes it possible to use inefficient production techniques and still stay in business. In addition to monopoly, sociologists have identified a number of ways in which markets may be organizationally embedded, and thus may depart in behavior from economic theory (LENGYEL, 2003).

Figure 2. The RCC model's logical frame



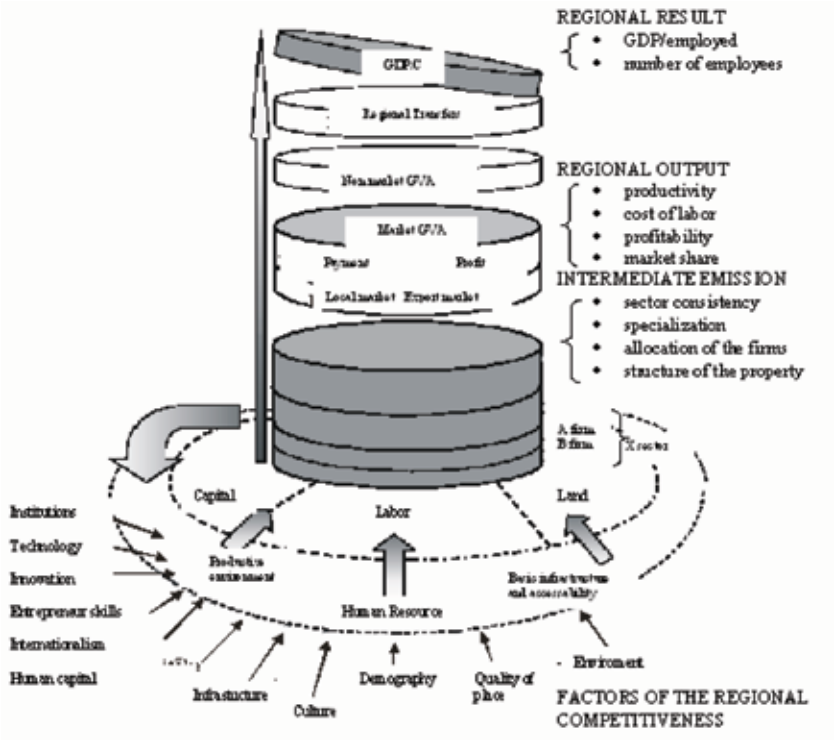
Source: LUKOVICS, 2007.

The logic of the model is that the comparative advantages appear in the higher aggregated level while the competitive advantages appear mostly in the regional or entrepreneur level. So call it is important to separate from each other the national and metropolitan level and the regional and local level in the sense of the advantages of the motion of market trade. The notion of competitive advantages can be understood in the level of nation or metropolitan. There is not any efficient market mechanism for the entire region, which can give role in the international market trade. So in the regional level the competitive advantages are the relevant markers.

The regional cylinder model of competitiveness

One of the researcher groups of the Cambridge University tried to synthetic the different theories of competitiveness. They realized there are a lot of approaches in the international bibliography to describe the competitiveness but there are some especially regional competitiveness concentrated researches. These studies' system is the regional cylinder model of competitiveness (KÁPOSZTA-NAGY-ÖKRÖS, 2008).

Figure 3.



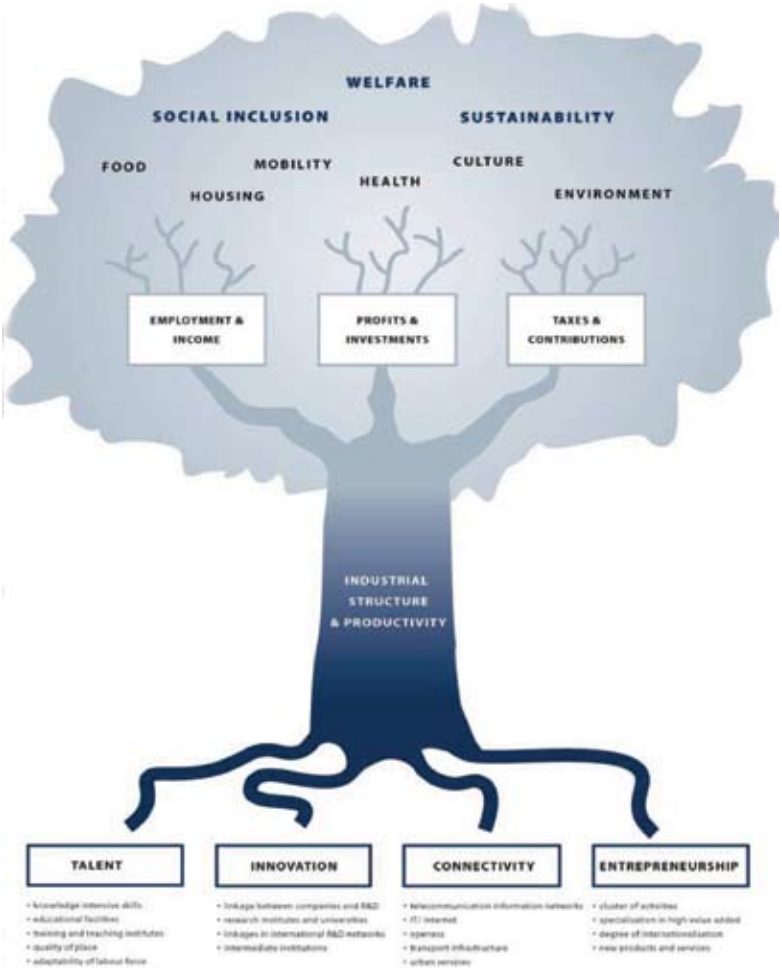
Source: LUKOVICS, 2007.

The competitiveness tree

From the description of the competitiveness tree misses the basic definition of the regional competitiveness. The goal of this conception is to make understandable the complex interaction system of competitiveness and to make a base of the decision makers and development agencies. The model is an organic system and it describes the cycles of the competitiveness as well.

- Aim: Providing a systematic overview of successful tools and instruments to support Lisbon Strategy
- Advantage A Resource for any subsequent approach (peer review, best practices, etc.)
- A Basis for extending the Contact Network

Figure 4.



Source: LUKOVICS,, 2007.

The structure of the competitiveness tree:

- Routes: these are the inputs (factors) of the whole model. This is the land where tree is standing. This is like an engine.
- Tree-trunk, Limb : Tree-trunk is the base of the competitiveness, the structure of the industry. The limb is the output of the model (employment, profit, taxes)
- Fruits: The competitiveness yield the nexts: stabile life, sustainability, social security.

Strategies in Hungary according to competitiveness

Each territories', regions' development opportunities are diverse it has been mentioned already. Two main strategies can be observed which depend on the state of the regions. At first in well developed regions where the direct capital investments are high the strategy could be to increase number of the enterprises which create high value added production, high technological investments and launch quality human force. Secondly in the less developed regions where the employment difficulties have appeared, the strategy could be to increase the number of the enterprises which generate high employment rate and reduce the unemployment rate and the future objective is to construct attractive area for the direct capital investments. (KÁPOSZTA-NAGY- VILLÁNYI, 2008).

The following development strategies streams could assist for the efficient competitiveness:

- Regional business environment and services development
- Development of the accessibility
- Generate territorial community networks
- SME's regional development
- Building the knowledge based on society and spread of the territorial innovation
- Regional and Local management systems development
- Initiation of strategies
- Reinforce of the regional marketing communication
- Protection and development of the environment
- Development of the services and the tourism infrastructure

General Competitiveness of Hungary

The Institution for Management Development (IMD) is a Swiss institute from Lausanne. The IMD publishes the World Competitiveness Yearbook (WCY) every year.

The IMD World Competitiveness Yearbook (WCY) is the world's most renowned and comprehensive annual report on the competitiveness of nations, ranking and analyzing how a nation's environment creates and sustains the competitiveness of enterprises The WCY ranks *55 countries* and *7 regions* by its

own methodology. The list based on 323 criteria. Two third of the list based on official statistics and indicators and the rest of it based on the IMD's researcher group specific criteria. The methodology of the WCY thus divides the national environment into four main factors: Economic Performance, Government Efficiency, Business Efficiency, Infrastructure.

The result of the combination of the Word Economic Forum's data and more than 110000 executive boards interviews gives the final report. This report ranks 125 countries by the help of two main indexes. The basic index is the Growth Competitiveness Index, which based on macro-economic conditions (1-4 pillar), efficiency generating elements (5-7.pillar) and the innovation elements (8-9. pillar). The second basic index is the Business Competitiveness Index (BCI), which based on the companies operations, strategies and the quality of the business environment.

Table 1.

Az IMD competitiveness gradiation (2007.)		
USA	1.	(-)
Singapore	2.	(-1)
Hongkong	3.	(+1)
…		
Austria	11.	(-2)
Germany	16.	(-9)
Estonia	22.	(+3)
Spain	30.	(-1)
Lithuania	31.	
Bohemia	32.	(+4)
Slovakia	34.	(+1)
Hungary	**35.**	**(-)**
Greece	36.	(-)
Portugal	39.	(+2)
Slovenia	40.	(+1)
Bulgaria	41.	(-)
Italy	42.	(-6)
Romania	44.	(-5)
Poland	52.	(+2)

Source: GKM 2007, Own edition

Table 2.

A World Economic Forum competitiveness list			
	GCI (2006)	**GCI (2005)**	**változás**
Swiss	1	4	3
Finland	2	2	0
Sweden	3	7	4
USA	6	1	-5
Japan	7	10	3
Germany	8	6	-2
Estonia	25	26	1
Bohemia	29	29	0
Slovenia	33	30	-3
Latvia	36	39	3
Slovakia	37	36	-1
Lithuania	40	34	-6
Hungary	**41**	**35**	**-6**
Italy	42	38	-4
Greece	47	47	0
Poland	48	43	-5
Croatia	51	64	13
Romania	68	67	-1
Bulgaria	72	61	-11

Source: GKM 2007, Own edition

The situation of the Hungarian competitiveness in the perspective of tax-, price-, and wage- system

In our opinion the regnant Hungarian government has one key instrument to impact and increase the potential of the competitiveness. This instrument is the ability to change the tax system. To change tax system is one of the shortest way to manipulate the competitiveness and to reach optimal result (KÁPOSZTA-ÖKRÖS, 2008). Although the Hungarian corporation tax's rate is one of the lowest in the European Union the full tax burden is one of the highest compare to regionally and nationally as well. The high tax burden includes the social insurance, local industrial tax, value added tax and other payroll taxes. In the last few years most of the countries from the Eastern European Region have tried to repair their tax system to create a better competitiveness. It can be observed that the Hungarian cooperate tax is low but the corporate have to pay high tax.

The following areas should be focused on:

(a) Cooperate Tax

Recommendation: The cooperate tax and the local profit tax together should be 16 % and from this the local municipality should get 4%.

(b) Local Industrial Tax, Innovation Affix

Recommendation: The current local industrial tax should be removed.

c) Social Insurance and Other Affixes

Recommendation: Social insurance and other affixes should be reduced.

(d) Value Added Tax

Recommendation: The highest (25%) and the lowest (5 and 15%) VAT should be converged to the European Union average and the VAT system should be harmonized to the other consumer tax burdens.

(e) Tax governance and related issues to the EU

Recommendation: It has to be special tax curt.

(f) Personal Income Tax

Recommendation: The system of the personal income tax should be simplified and it has to be one or two tax rate system.

The growth of the amount of the real income is one of the key indicator to show the competitiveness of a country. In the last few years in hungarian real incomes have been growing. The real earnings haven't been showed this tendency, which generate the modification of the competitiveness to the negative way.

Conclusion

The globalization and the competitiveness have strong interaction to each other. The competitiveness is strongly determined by the factors of price- wage and the tax system. In our researches it can be seen that these tree indicators interact to each others and they modify each other's efficiency. The effects of these tree indicators define the country's competitiveness and the potential of the development. If the tax burdens start to decrease the real earning start to increase, because there will be more money in the economical circulation and it will generates determinate growing services sector. The following recommendations present how to improve the competitiveness in Hungary:

Price competitiveness:

- It is not enough to increase the earnings of the employees it is also important to improve the efficiency of the productivity in the processing industry sector. Otherwise there will not be sufficient escort for the enlarged earnings.

Tax-system:

- The elements of the tax-system should be changed which directly impact the economical growth

- The national expenditure should be reduced and the structure of the governance should be reconstructed. The blocks which are created by the bureaucracy should be cut down.
- The reform of the national social insurance is essential.

Wage system:

- It is not enough that the relative incomes are growing in the companies sector, it is also a crucial task to increase the productivity potential of the SME sector.

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RELEVANT METHODS AND PROCESSES IN REGIONAL PLANING AND SPATIAL DEVELOPMENT

TAMÁS TÓTH-IMRE ÖKRÖS-BALÁZS PÉTER

Theory and practice in regional planning

This paper concerns systematization, analysis and problem solving. In assembling the learning material, we have consulted over 50 items of relevant literature during our research, the majority of which is also referred to in this paper. However, we do not wish to simply reiterate the thought processes presented in the sources we referred to, but to present them in the light of our critical observations regarding the results we found plausible, as well as part of the methodology. Writing a scientific thesis about the development of regional planning and programming systems in Hungary is, at present, a formidable task: explaining these issues in their entirety would be well beyond the framework and length limit of this study, or indeed a dozen other studies. For this reason, it was necessary to impose limits on the issues presented here.

Many of us share the idea that the continuous updating of regional planning is necessary to identify and correct mistakes made on the one hand, and to meet the demands of the ever-changing times on the other. Already by the end of the seventies, conceptions of 'classic' regional planning were met with a certain skepticism due to the character of socioeconomic development and the inherent difficulties of the profession. In the 21st century, this skepticism has only become more and more justified:

- There is a more urgent demand for the complex treatment of unevenness in development, not just in certain Member States of the European Community but within the community as a whole, entailing the considerable expansion of resources;
- Consumer-centric approaches to economic growth were slowly 'consumed' by the famous Club of Rome reports on limits to growth and resource constraints (MEADOWS 1972);
- Social, political, ecological and qualitative aspects of progress were disregarded;
- For democratic policymaking organizations, the so called 'scientific' planning with its abstract and mathematized models had become less and less transparent;
- This planning technique, at the same time, displayed a peculiar readiness to serve large business interests unfamiliar to democracy;
- Functions within the business have, in terms of spatial arrangement, 'left' the region, effectively eliminating the potential of actual policymaking;
- The extending levels of policymaking are no longer transparent;
- Huge organizations as well as systems wasting energy and resources have received a wide range of unregulated benefits;

- The effectiveness of regional interventions has not only become indeterminable, but questionable as well;
- Regional resources were quickly depleted, with excesses turned into profit elsewhere;
- The ability of regional self-help and self-governing has weakened;
- The Sustainability Policy, as a general policy, must be amended by improving the conditions for livability. Long-terms sustainability is only possible in the case of livable environments (VAJDA 2007);
- It is fundamental in regional cooperation that the population be well-informed, and any form of development be transparent (VAJDA 2007);
- Processes on the local, regional, national and indeed global levels are virtual arenas in terms of complex competition. Furthermore, individual settlements, regions and countries must compete with each other, and this holds true for ideals, ideologies and institutions on the various levels as well (NEMES 2000).

We are certain that the above listed phenomena could at least in part be eliminated by planning that is more efficient in social terms. This simply means that planning itself must be reformed. Instead of an approach that is basically ad hoc – trying to issue changes under pressure or for the sake of it –, we need a systematic approach to the factors involved, which consequently requires structured planning processes.

We can see then how social philosopher and critical rationalist Karl Popper may be right in saying: 'With each problem we solve, not only do we discover newer, as yet unsolved problems, but we also realize that what we believed to be stable ground is, in reality, uncertain and fluctuating.' (POPPER 1962) We must, therefore, stop taking propositions for granted, and return to the original point of departure. The archetype of the basic standard was, as formulated by Jeremy Bentham: 'The best possible for the most people possible' (quoted in Taylor 1980). According to George Benko, even if we happen to adopt this philosophy, there are still two more questions we must consider:

1. Who decides what is 'best'?
2. How can we ensure that the most people possible benefit from it?

Since all community planning processes entail at one stage or another a setting of goals, such goals cannot be determined – even in theory – without assuming a certain amount of subjectivity. In the case of community planning, goals should be determined 'in accordance with the common good'. However, there is no objective public moral from which these goals (the common good) could be rationally deduced. Consequently, levels with varying access to policymaking processes (also called paradigmatic levels) are the ones influencing the setting of goals. Pragmatic planning today is politically more sensitive and less 'rational' than it had previously been. Expectations regarding planning have also changed. Planning have increasingly become a task of achieving consensus, moderating debate and bargaining processes; consequently, efficient planning inevitably requires that the planner espouse

the principle values of the contractor. The planner is usually explicitly expected to support the endeavors of the commissioner, and the planner's ability to lobby and articulate interests may play a very important part in receiving the commission in the first place.

Decisions are based on conscious value orientation, and in all cases this is influenced by underlying interests. Different regional levels and agents represent different values and different people, and the state intervenes based on specific preferences, constraining some and supporting others. Politics can either acknowledge 'objective knowledge' or temporarily dismiss it-in this case it will simply become accessible and applicable against the reigning regime through a different channel. Planner subjectivity may be filtered out from various stages of the planning process, but the process as a whole will inevitably become politicized. The allocation of resources, the prioritization of investments, the formulation of new structures all require decisions based on value orientation. In the community sphere, the majority of decisions are made by referring to the 'common good'; but what does 'common good' mean in a representative democracy? Common interest in daily practice simply means momentarily political consensus, or worse, the 'will of the majority' against the minority. The ruling political elite and the economic power ascribed to it is what determines the common good at all times.

According to Hankis, the common good is 'the result of a social agreement assumed to be successful'. I agree that a wider social agreement is by all means necessary; however, its successfulness is questionable at best, and it is difficult to determine those who should be involved in the agreement process. It is obvious that any sort of compromise made during the process of bargaining will likely result in a 'common good' that is far from the 'unknown optimal' (BENKO 1999). The issues to consider, therefore, invite us to rethink our entire economic and social philosophy. We must revise common conceptions about the limitlessness of consumer growth, the unpredictability of external effects, the globalized market and representative democracy. However, we cannot consider these issues here, and must contend ourselves with providing answers to all questions concerning planning.

In devising a particular planning document, we must first consider what our current goals and priorities are on the given (regional) level in the given programming (planning) period. What are the problems to be solved, and if enough resources remain, what other goals do we wish to achieve? The answers can only be deduced from the demands of the stakeholders; therefore, the first step is the assessment of demands, taking into account the factors and circumstances that (will) determine them. Next we must decide upon the kind of complex or integrated (strategic) programs that are desirable and efficient in achieving these goals, and upon the series of operations (operative programs) with which to implement these programs while also applying necessary changes as well as constant monitoring. In this manner, we must place people and their demands into the focal point of planning, and it is in accordance with this goal that we devised our theory – using the notions of planning in Bakos (2001) – of the planning process. Please consult Figure

1 for the planning process supplement with applicable methods for each step. Previously we have reviewed the terminological and methodological principles necessary for the systematic interpretation of planning processes and in devising a framework for the application of applicable methods.

In this section, we explain and systematize – in strict accordance with length limits –the primary methods that can be readily and effectively applicable in practice, or, in our understanding, facilitate the work of expects in this field. Due to length limitations, we do not aim at presenting methods in their entirety; instead we have chosen to only analyze index-based methods in greater detail, and not discuss, at present, statistical and information databases. The general interpretation of 'planning' – meaning by this term the outlining of a desirable future condition, and determining the way(s) and conditions (means and resources) potentially sufficient to achieve our goal – is still acceptable today. Problems actually emerge whenever we consider the often unreasonably explicit plan resulting from planning as a rigid and immutable agenda that we must keep to the letter. This was the reason behind the distortions and faults of the planned economy, for instance. This is exactly the kind of planning a changing economy does not need.

Nevertheless, the importance of planning today must not be underestimated. To accept this, however, we must approach the subject in a different manner; namely, that the objective of planning is not devising the ultimate operational program, but adapting constantly to the changes of the economic environment – relying on the results of as many 'what if' scenarios in research as possible, and always revising former ideas and notions. This kind of planning would require a considerable amount of extra effort compared to previous practices – or at least it would using traditional and manual methods. However, with the help of computer technology, these difficulties can be reduced, or indeed eliminated, because recalculating consecutive plans manually over and over again becomes unnecessary; it is enough to record the correlations and calculation procedures of planning. Once we have done so, the results of necessary data change will be directly observable and analyzable as a result of computer recalculation.

A brief overview of planning methods

Making decisions in planning requires the application of different procedures and planning methods. These methods can be systematized in several ways, but for our purposes, we have chosen a system that differentiates between the various methods according to their expected precision in approaching the theoretical optimum. In this approach we distinguish two major groups:

- no optimization methods;
- and optimization methods.

No Optimization methods

In the case of these methods, decisions are made based on taking into account the constraining factors and devising several versions, but only ensuring a standard that is sufficient to achieve particular goals. This view of planning is commonly characterized as aiming for what is 'good enough' as opposed to aiming for what is 'the very best'. The different versions are usually devised based on the so-called Logical Calculation Method, also referred to as the traditional method, because it bases planning decisions primarily on logical and professional considerations and arithmetic calculations. Previously they were applied manually, but presently the computational versions of these methods are also available. In relation to agriculture, for instance, no optimization methods are primarily used in planning the technological process. We must take into account, however, that planning the various sectors separately, even if they are optimal considering input standards, will not lead to the optimality of the whole production structure containing all these sectors. These planning methods are, nevertheless, of great importance, because we are usually concerned not with the size of the area and what we are producing, but 'how' we produce it; and the answer lies in devising different technological versions for each sector.

Simulation within operations-research methods is a procedure that does not aim to determine the optimality of the goals set in planning; nevertheless, it can be applied rather effectively in decision problems where the potential values of the initial conditions require a large number of versions to be devised during planning.

Optimization methods

Optimization methods are, along the lines of the conditions set by constraining factors, suitable for devising different versions in planning where the given goal assumes an extreme value (maximum or minimum), meaning that it is usually optimal. Within corporate planning, these methods can be applied to ensure the maximization of income, that is, to determine the very best (optimal) production structure. These methods always involve the use of mathematical or programming procedures, for which it is indispensable to have at our disposal all the factors that may influence the outcome in numeric form. Unfortunately, this condition is fairly difficult to fulfill, which may explain why optimization methods (such as Linear Programming) are still rarely used in corporate planning today. The computational application of logical and calculative planning methods, however, facilitates coping with the data demand of these procedures, which in turn may become more prominent in planning.

The two approaches and methods of planning outlined above can also be combined; forcing technological versions to 'compete' with other corporate sectors to achieve a determined goal (usually the best possible income), may provide the solution to an optimal ***production structure***.

Experience in the field has been that one of the weaknesses of Hungarian regional planning lies in the lack of methodological knowledge and using existing knowledge inadequately in terms of standards. We hope this paper will also contribute to eliminating this lack of knowledge. Let us begin by grouping and systematizing a range of methods in order to facilitate orientation and to bring attention to the high number of elements at our disposal, and how we should treat them as a complex system.

Table 1. Regional planning methods

GROUP METHODS Questionnaire Brainstorming Collective Notebook (CNB) Rohrbach's 635 Method METAPLAN Method Logical Framework Approach (LFA) Regional Deficiency Map SWOT Analysis	INDEX-BASED METHODS Extreme Value Index Variance indices Hoover Index Road Network Efficiency Index Complex Transport Network Index Point methods
POTENTIAL OF APPLYING CARTOGRAPHIC REPRESENTATION AND THE GEOGRAPHICAL INFORMATION SYSTEM (GIS)	OPTIMIZATION METHODS Fuzzy Logic Linear Programming
MATHEMATICAL AND STATISTICAL METHODS Regression Analysis Factor Analysis Principal Component Analysis Cluster Analysis	MACRO-MODEL METHODS Regional input-output models Social Accounting Matrix ECO-LINE Model, SOCIO-LINE Model, LINE Model SPEL Model, AGRIS Model, OPAL model, etc.

Source: author's editing based on TÓTH (2005)

In our case, this sort of system serves the purpose of providing a basic framework for the development of planning processes; of all methods listed, we shall examine only one of the groups in greater detail.

Index-based methods

The Dual Index is a widespread method for its simplicity and clear content. It is the quotient of the average of above-average and below-average values of the total distribution (MAJOR and NEMES NAGY 1999). Usually the above-average and below-average values of the total distribution are replaced by an equal number of the highest and lowest values. This index is generally combined with other methods because it only offers an overall view, and does not reveal the inequalities between area units. Even the Hoover Index, one of the most widespread and generally used regional inequality indices, is merely more than a supplement in certain cases because it does not reveal the specific characteristics of the various regions, but instead determines

regional inequalities within a country in generic terms. This statement is also true of relative distribution – that is to say it is supplementary in nature –, since these indices always characterize the regional inequalities of larger area units (such as a country) in general, and do not take into account the individual characteristics of smaller area units, such as small areas and counties. Therefore, analysis also requires other, more comprehensive mathematical methods.

The Road Network Efficiency Index, in simple terms, operates like the scales that balance 'reality' on one plate, and the network system servicing it on the other, both mapped out through some sort of procedure. The balance of the scales or the direction and degree of their sway characterizes harmony, relative deficit or relative saturation. Arranging the social, economic and environmental elements of 'reality' in a system that covers every relevant aspect yet is easily manageable in practice requires a genuinely multidisciplinary approach and cooperation. Devising and integrating such complex or similarly complex indices into the various models is crucial and necessary, bearing in mind at the same time that this is only possible by conducting precise testing and research.

In the case of the Complex Transport Network Index (TRANS), if we wish to keep track of the factors related to transport system development, then this requires methodology that is based on the widest possible correlations between society, economy and environment. It is, at the same time, obvious that in order to incorporate a realistically founded methodology (justified by vast correlations) into a model, we must establish a database for recording and managing economic and mobility factors instead of gathering data ad hoc, and we must consult complex, increasingly elaborated theories based on such databases that examine factors in a more complex manner on precise mathematical grounds. It would be reasonable to provide the conditions for this sort of 'modeling' as soon as possible, and we trust that, when finally developed, the system presented above will, in the future, become an effective method among procedures supporting and facilitating the process road system development. One particular deficit of Hungarian transportation profession lies in the complete alienation of theory and practice; regarding the transportation sector, this paper is aimed at presenting those, as yet undeveloped methods that may potentially contribute to the professional well-foundedness of decision in infrastructural investments.

The regional planning process

Socioeconomic programs involve multiple sectors and various goals. The objective of such programs is to implement economic and social changes effecting the whole region. To this end, we must use integrated strategies that are directed at particular groups (such as communities, enterprises, employees or the unemployed). We must achieve a comprehensive effect by a proper combination of the various specific effects directed at different goals. The complex mechanism of modern society and economy presents us with more and more issues concerning regulation; this is why regional

planning and development have become more and more essential from the second half of the 20th century. In this paper we wish to illuminate the fact that regional development is a series of interventions aimed at readjusting the spontaneous processes of regional progress.

Economic and social progress is inherently and in all cases unequal across the various regions; therefore, intervention is usually aimed at reducing regional and social inequalities. For this reason, interventions in regional development can only be successful if we are fully aware of the processes of regional progress that we wish to intervene in. The desired intervention is carried out within a suitable organizational and institutional framework, but such actions must be preceded by a careful and deliberate planning process, and this is exactly what has become the focal point in research as well. Based on the discussion above, it has become clear in the course of our investigations that the goal of regional planning (the very best for the most people possible) can only be achieved or approximated – it would be rather utopist to assume that this goal can be 'achieved', though that does not mean we should not strive for it – by a well structured planning process and the application of the right methods. As a result, TÓTH (2005), based on the above introduced researchers and their work, has managed to approach and construct the process of planning in a new light, by incorporating a wide range of principle methods applicable for each step of the process; the list of methods is, however, incomplete, since the repertoire of potential methods is probably inexhaustable and constantly expanding.

The regional planning process

Step 1: Mapping out the demands of stakeholders in regional development

- Demands of people inhabiting and visiting the region
- Demands of local government and small area settlement associations
- Demands of entrepreneurs and entrepreneur organizations
- Demands of civil organizations

Applicable methods:

- Group methods (Questionnaire; Brainstorming; Collective Notebook [CNB]; Logical Framework Approach [LFA])
- Macro-model methods (Social Accounting Matrix)

Step 2: Environmental assessment

a. Assessment of global environment, observing global tendencies

- Definiteness of the area of regional progress, regional impact
- Principal tendencies of the global economy, expected impact of changes
- Directions of international progress in the dominant economic sectors of the region

Applicable methods:

- Group methods (Regional Deficiency Map; SWOT Analysis)
- Index-based methods (Extreme Value Index; variance indices; Road System Efficiency Index; Complex Transport Network Index; point methods)

- Mathematical and statistical methods (Regression Analysis; Factor Analysis; Principal Component Analysis; Cluster Analysis)
- Optimization methods (Fuzzy Logic)
- Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (regional models; ECO-LINE Model; SOCIO-LINE Model; LINE Model)
- Macro-model methods (Input-Output Approach; Social Accounting Matrix)

b. Assessment of national economic environment, observing tendencies

- National economic and sector tendencies
- Administrative and institutional development tendencies

Applicable methods:

- Group methods (Logical Framework Approach [LFA]; Regional Deficiency Map; SWOT Analysis)
- Mathematical and statistical methods (Regression Analysis; Factor Analysis; Principal Component Analysis; Cluster Analysis)
- Macro-model methods (ECO-LINE Model; SOCIO-LINE Model; LINE Model; Input-Output Approach; Social Accounting Matrix)
- Cartographic representation and the Geographical Information System (GIS)

c. Assessment of means, resources and the institutional system of regional development

- Assessment of resources for regional development
- Assessment of institutional system for regional development
- Assessment of efficiency of regional development

Applicable methods:

- Group methods (Questionnaire; SWOT Analysis; Logical Framework Approach [LFA]; Regional Deficiency Map)
- Mathematical and statistical methods (Regression Analysis; Principal Component Analysis; Cluster Analysis)
- Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (Social Accounting Matrix; LINE Model)

d. Assessment of development concepts affecting the region (such as regional directions and achievements of the National Regional Development Concept [OTK])

Applicable methods:

- Group methods (Questionnaire; Regional Deficiency Map)
- Index-based methods (Extreme Value Index; variance indices; Road System Efficiency Index; Complex Transport Network Index; Hoover index; point methods)

- Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (LINE model)

Step 3: Assessment of regional assets

- Assessment of social environment and human resources (social organizations; cultural assets; values; regional identity; demographic structure and prognosis; [un]employment rates; human capacity; institution network)
- Assessment of economic basis (principal economic sectors and their respective directions of progress; internal and external economic relations; state of infrastructure; assessment of localizing factors; innovation potential of the region; competitiveness of economy)
- Environmental assets (natural assets; natural and environmental capacity; factors influencing nature management)
- Assessment of infrastructure and provisions of regional institutions (housing; access to health, social, educational, cultural, leisure, sport, trade, services and administrative institutions)
- Assessment of settlement network and cohesive relations

Applicable methods:

- Group methods (Regional Deficiency Map)
- Index-based methods (Extreme Value Index; variance indices; Road System Efficiency Index; Complex Transport Network Index; Hoover Index; point methods)
- Mathematical and statistical methods (Regression Analysis; Principal Component Analysis; Cluster Analysis)
- Optimization methods (Fuzzy Logic; Linear Programming)
- Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (Social Accounting Matrix)

Step 4: Dynamic analysis of regional assets and demands

- SWOT Analysis of external environment conditions
  SWOT Analysis of regional assets
- Synthesis of stakeholder demands and potential in regional development

Applicable methods:

- Group methods (Logical Framework Approach [LFA]; SWOT Analysis)
  Mathematical and statistical methods (Regression Analysis; Factor
- Analysis; Principal Component Analysis; Cluster Analysis)
  Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (Social Accounting Matrix; LINE Model)

Step 5: Setting strategic goals

- Principal goals and directions of current regional development concepts
- Correlations between goal hierarchy, goal pyramid and partial goals, planned timetable for achieving goals

Applicable methods:

- Group methods (brainstorming; Collective Notebook [CNB]; Rohrbach's 635 method; METAPLAN method; Logical Framework Approach [LFA]; Regional Deficiency Map; SWOT Analysis)
- Optimization methods (Fuzzy Logic; Linear Programming)

Step 6: Devising possible development models and scenarios

Applicable methods:

- Group methods (brainstorming; Collective Notebook [CNB]; Rohrbach's 635 method; METAPLAN method; Logical Framework Approach [LFA]; SWOT Analysis)
- Macro-model methods (Social Accounting Matrix; LINE model)

Step 7: Impact assessment

- Suggestions for measuring the impact of development; expected environmental and economic changes; social reactions

Applicable methods:

- Group methods (Regional Deficiency Map; SWOT Analysis)
- Mathematical and statistical methods (Cluster Analysis)
  Cartographic representation and the Geographical Information System (GIS)
- Macro-model methods (ECO-LINE model; SOCIO-LINE model; LINE model; input-output approach; Social Accounting Matrix)

Step 8: Suggestions for resource and institution system in conformity with goals

- Financial resources
- Non-financial resources
- Organizational framework and human resources for devising and implementing strategies

Applicable methods:

- Group methods (Collective Notebook [CNB]; Rohrbach's 635 method; METAPLAN method; Logical Framework Approach [LFA])
- Optimization methods (Fuzzy logic; Linear Programming)

Step 9: Implementation

- Implementation of strategy; segmenting and projecting programs

Applicable methods:

- Group methods (brainstorming; Collective Notebook [CNB]; Rohrbach's 635 method; METAPLAN method; Logical Framework Approach [LFA]; SWOT analysis)

Step 10: Monitoring

- Devising a plan for monitoring the process of development in order to achieve goals
- Necessary readjustment in case of unexpected effects

Applicable methods:

- Group methods (questionnaire; Logical Framework Approach [LFA])
- Index-based methods (Road System Efficiency Index; Complex Transport Network Index; Hoover index)
- Macro-model methods (ECO-LINE model; SOCIO-LINE model; LINE model; input-output approach; Social Accounting Matrix)

The methods listed at each step of the process do not, of course, ensure the successful execution of the given step to the same degree. At present, our goal has simply been to bring attention to the wide range of applicable methods, because based on our experience, their application in practice for regional planning in Hungary is incidental at best. There are, of course, exceptions, such as Nemes Nagy, Retchnitzer, Lengyel, Lados, Faragó and others. However, their work only makes it clearer that there is a tangible professional vacuum in practice on the various regional levels. It is worth noting here that any technique adopted from elsewhere is usually adapted and simplified; it is always quite problematic to present canonically the original technique from a purely scientific aspect. Its assessment, however, is a primarily pragmatic activity; we must synthesize the methods and procedures applied. Questionnaires carried out properly (confidentially or by telephone, for instance) ensure the adequately precise assessment of net effects. If there are several assessments based on the same techniques, then it is easier to compare results; however, if we conduct several investigations on the same production surface, they can both confirm or reject one another. This is why we can use in system development the internationally accepted concepts and methods of **Local Economic Development** (LED) to devise development programs directed at economic structural change and job creation in small Hungarian regions. Through the adaptation of Imre Lengyel, this technique has become the focal point of Hungarian regional development; these issues are one of the most prominent subjects in regional research and research in economic sciences today. The economic success of any settlement today depends on whether it is able to adapt to the dynamically changing local, national and international market economy. Systematically devised LED is increasingly used worldwide by settlements that wish to stabilize their local economic capacity in a given sector, and improve the investment climate as well as the competitiveness and productivity of local business sectors, enterprises and workers. Whether a community is able to improve its standard of living, create new economic opportunities and successfully fight poverty depends on how well it is able to manage LED processes and how effectively it stands up to the challenges of a more and more competitive market economy.

LED was developed at the beginning of the 1970s as a result of local governments realizing that in order to gain comparative advantages, there is constant movement of enterprises and capital between the different geographical regions. Once local communities assessed their respective economic infrastructures, they were able to deduce more efficiently the factors that facilitated or hindered economic growth and the accumulation of investments. With this new found knowledge, local communities then attempted to develop the economic infrastructure and improve employment through strategically developed programs and projects that helped overcome obstacles and facilitate investments. Local economies, however, are facing greater challenges today. LED strategic planning consists of 5 stages, each containing 5 steps. The process is very flexible: any stage can be carried out parallel to another to meet local demands. If any problems arise at any particular phase, that does not necessarily imply that the problem resulted from current operations, but rather that the previous stage was not carried out efficiently. In that case it may well turn out that both the previous and the consequent stages have to be reconsidered and revised. LED is a typically 'live' strategy: it is always readjusted as circumstances demand (Swingburg-Goga-Murphy 2004). In the following section, we present the LED system supplemented with applicable method groups for each step of the process to facilitate more effective application through providing applicable 'ammunition' (a system of means and resources). Please consult Figure for a set theory approach to the correlations between methods and group elements. At present we have only attached the various groups to the respective steps based on practical experience.

Local Economic Development (LED) process and applicable method groups

1. Organization

1.1. Choosing staff; appointing head of LED working group
1.2. Establishing political policymaking procedure
1.3. Establishing partnerships between local stakeholders
1.4. Establishing relationships on various levels of government
1.5. Assessing organizational competence for devising LED strategies and projects

Applicable method groups:

- Means of organizing assessment; sociological methods; judgment methods

2. Mapping out the local economy

2.1. Reporting on processes affecting business life
2.2. Determining and restricting necessary data types
2.3. Preliminary analysis of collected data, locating information gaps, collecting additional data
2.4. Devising plan for eliminating informational gaps
2.5. Data analysis, survey on local economy

Applicable method groups:

- Economic indices; social indices; complex indices; means of organizing assessment; sociological methods; data analysis methods; mathematical and statistical methods; precise methods of parameterization

3. Devising the strategy

3.1. Defining vision
3.2. Devising strategic goals
3.3. Devising operative policies
3.4. Devising programs
3.5. Selecting projects

Applicable method groups:

- Means of organizing assessment; sociological methods; data analysis methods; mathematical and statistical methods; precise methods of parameterization; judgment methods

4. Implementing the strategy

4.1. Devising comprehensive strategic LED plans for each program and project
4.2. Devising a particular project action plan
4.3. Defining an institutional framework for implementation and monitoring
4.4. Having efficient input at disposal
4.5. Defining task to be executed in the project action plan

Applicable method groups:

- Means of organizing assessment, sociological methods, data analysis methods, mathematical and statistical methods, precise methods of parameterization, judgment methods

5. Revising the strategy

5.1. Defining the 'what', 'when' and 'why'
5.2. Monitoring
5.3. Assessment
5.4. Institutional commissions
5.5. Reviewing strategy and planning process

Applicable method groups:

- Economic indices, social indices, complex indices, means of organizing assessment, sociological methods, data analysis methods, mathematical and statistical methods, precise methods of parameterization, judgment methods

It may be of interest to review in greater detail the first stage of the above mentioned process in order to map out its correlations; it is, after all, evident that all efforts must be synthesized during the various steps that may even run parallel to one another. This concerns the 5 principal steps, as well as the elements of step 1. In initiating the planning process of the strategy, either a person or an organization needs to assume leadership. In practice this is usually

done by means of the local government assigning this task to a newly founded or already existing department. In other cases, a local economic development agency is established, which then operates as an independent or semi-independent institution. In many cases the LED working group may even consist of a single member (in such a case the working group can be expanded by training colleagues) (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

Since LED covers a wide range of activities, it is crucial for working groups to work under loyal and competent leadership. Local governments and less developed regions typically face a lack of resources; meaning that there is not enough capital to implement all measures of the strategy simultaneously. Consequently, it is important to establish respective priorities while at the same time ensuring the balance between supplying particular needs. Therefore, a technical and policymaking mechanism is in order, which then sets priorities in accordance with the given circumstances. In order to effectively implement a strategy, one must have a defined political objective and political support. If local political leaders participate in devising LED, then the resources required for the strategy can be more easily acquired through support. In practice, this involves assigning LED leadership and responsibility to the local political leader. This process is also supported by the fact that LED strategy reports must form an integral part of the annual policymaking period of the local government and/or local government association. In our case, the local stakeholders are persons, enterprises and organizations from the private, the public and the non-profit sectors that are able to participate in devising and implementing the strategy. These stakeholders should be involved in the entire LED process from devising the strategy through implementation to monitoring. As a result, we can improve:

- credibility and equity (the process is public);
- efficiency (it is easier to understand real economic needs);
- successfulness (local stakeholders can mobilize their own resources).

The national, regional and county levels of government all play a key role in making the environment eligible for local economic development. One must consider the LED in relation to other development plans of the particular settlement or region; furthermore, one must look beyond the particular local area to see what other programs, plans, regulators and regulations may influence local processes. These may include national, regional or county plans and/or regulations:

- National Development Plan (currently: New Hungary Development Plan, ÚMFT)
- Agricultural and Rural Development Plan (currently: New Hungary Rural Development Strategy Plan, ÚMVST)
- National, regional and county-level regional planning, etc.

Finally, we must conclude the first stage of the process by examining the competence of the organization to devise LED strategies and projects, as establishing a suitable organizational framework for devising and

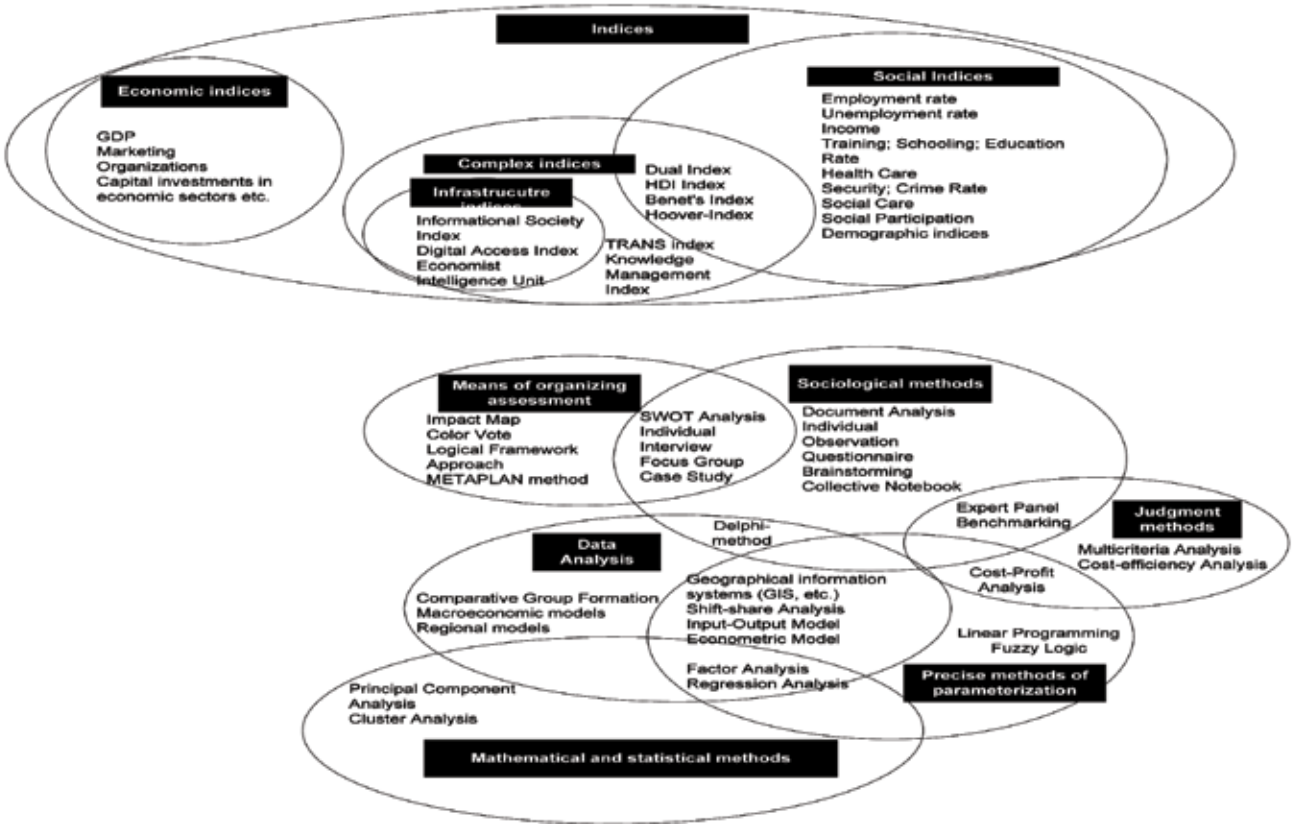
implementing local economic development strategies is a gargantuan task. Consider the following institutions:

- **Notarial bureau or city hall** – Advantage: it gains particular importance as it is supported by the most notable officials. Disadvantage: it is unduly subordinated to the political agenda of the mayor;
- **An already functioning institution or department** – Chances are that LED may be subordinated to the major directives of the department;
- **Establishing an agency** – Is able to devise an organizational background capable of long-term sustainability as it is not exposed to political processes.

We believe that the above reviewed examples – the two planning processes in particular – as well as reviewing the first step of LED is a fine example of the complexity of regional planning, the success of which is greatly determined by the professional management of the means and resources used. In our understanding, it is crucial to emphasize even more the multiplicity of methods applicable and to represent the correlations between those methods, bearing in mind that this is merely the beginning of the work and not the end. We also encourage fellow colleagues to help these issues become more tangible and understandable for those interested in this scientific field, and highlight the correlations between applicable techniques with the purpose of bringing attention to them. In this spirit, we make one final attempt, hoping that many will consider it worthy of contemplation.

As our reader examines Figure 1, we hope that many will have the feeling that something is missing, whether this lack is in relation to the groups listed, the methods or the way the groups are composed. We emphasize, again, that our goal is to offer a point of departure for users, method developers and those wishing to gain a sense of direction, with the purpose of inviting contemplation. We hope that many will consider these issues in different ways, alter this set system, and, by doing so, help increase the efficiency of planning and development processes (KÁPOSZTA-NAGY-ÖKRÖS, 2008).

Figure 1. System of applicable methods in regional programming



Source: Diagram devised by the author

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REGIONAL HDI AS A TERRITORIAL AND SOCIAL DIFFERENTIATION INDEX IN CENTRAL EUROPE

ZOLTÁN EGRI-VIKTÓRIA TÖRŐCSIK-TAMÁS TÁNCZOS

Introduction

The human development index – of the alternative indexes – has an outstanding importance. The index is based on political declaration[7] (Universal Declaration of Human Rights[8], 1948. 12. 10.), and tries to appreciate the minimum requirements of the whole dimension of human welfare and not only the economic competitiveness. Among other things that gives the importance of this index that unlike the other alternative indexes this can be calculated every year and it is counted, too.

The purpose of this study to present the human resource-features of Central-European regions, its regional and social differ effect and its methodological analysis. From the point of view of the regional development – in the point of regional development of the European Union – the examination of the GDP/capita relation is compulsory because it gives the base of human resource development and growth. According to our hypothesis in the case of regional development the knowledge of HDI gives a more shaded image than in case of economic development.

Regional HDI, as a territorial and social differentiation index

The subnational regional adaptation of HDI can be found in more countries what we studied. The National Human Development Reports have big traditions in Romania. In the main reports[9] we can find indexes what show the human development by development regions and counties and in the level of settlement too, on the previous two level the HDI factually. And they announce the link between the HDI and the regional development funds, too. In 2004 the value of Bucharest, the Central and the Western regions is higher than the national average. The biggest difference is mainly in economic dimension respect, the following is the rate of enrolment, then the qualification- and life expectancy index make differences. The disadvantage of rural regions in urban-rural approximation is considerable. The gross enrolment rate is more than twofold in urban regions, in view of life expectancy the people live here two years longer.

[7] Claude Grasland makes clear in his presentation that the index is politically essential and scientifically correct. It is a policy directed index and not a data-driven. (So it chooses one not only from the available data.)

[8] The Universal Declaration of Human Rights declares the right to the development; although this is reduced to further working up in connection with certain rights, it is clear that the social change-approximations what are based upon human rights complete the approaches what are based on the structure standard of human development. (Dimitrina Petrova, 2002)

[9] A Decade Later: Understanding the Transition Process in Romania. National Human Development Report Romania 2001-2002; Local Governance. National Human Development Report Romania 2003-2005; Making EU Accession for All. Fostering Human Development by Strenghtening the Inclusiveness of the Labor Market in Romania. Human Development Report Romania 2007.

TRIDICO (2007) analyses the human development trend of Poland. Studying the transition period he counted the HDI for 1995 and 2004 (with the original methods and content) for 16 Polish voivodships. The paper shows "the human development efficiency"[10] analyses the link between the HDI and per capita GDP. Here the East-West region came to the front; according to the conclusion the Eastern regions form their income more effectively for the sake of the correction of human development dimensions, even they belong to defeated regions in the view of GDP. The non-income indicators are on lower level in the West, than in the East.

The regional disaggregation of human development in Hungary succeed mainly in the level of small region and county. The calculation of regional, county HDI was done by NEMES NAGY (2000) in Hungary. Between 1990 and 1996/7 the human development index abated in the county of Baranya, Somogy, Borsod-Abaúj-Zemplén, Nógrád és Jász-Nagykun-Szolnok. The only obstacle of comparison is the specific of that method what was used to 1993, which hasn't used extreme values in case of certain socially disadvantaged indexes[11].

The small region adaptation is "owing" to OBÁDOVICS and her co-author (2003). HDI shows significant differences according to the rurality nature of small regions. The HDI-average was 0,64 in the essentially urban small regions, 0,58 of the mainly rural small regions and 0,38 of the essentially rural regions. (OBÁDOVICS 2003) CSITE and NÉMETH (2007) has made significant innovations in the regional analyses of HDI with their growth- and disparity theoretical studies. According their formulation HDI is restrictedly suitable for touch the regional differences inside the country, and between the development level of other dimensions of quality life and economic the inconsistency is significant.

It is an important speciality that (not only) the regional disparities what are "produced" by the market participants the big systems (education, health care) of the state redistribution mitigate these in a large way. The disparity structure became stable during 1994-2005. Among the small regions we can discover convergence, while between the counties and the regions divergence.

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[10] Countries differ in how well they translate income into human development – their "human development efficiency". (HDR 1996) "The link between income and human development is not necessarily automatic." (NHDR Romania 2001)

[11] In spite of all sparkles of the equation that was its weak point that the estimation of increase in output of a given country was bounded to the achievement movement of other countries. This has an uncertain question what can be understood very easily. For example if the life expectancy of every country rises with the same amount, the values of HDI stay unchanged, although in the spirit of the original idea this change must be respected clearly to a development. Furthermore relying upon this calculation method the yearly values of the index can't be compared, because the resulting change in the extreme values of certain indexes modifys the calculated value of all other countries (Trabold-Nübler 1991:238-239). From 1994 the composers of the index fixed in the case of every index their extreme values and then compared the current data of certain countries to these maximum- and minimun values. (Husz 2001) Csite and Németh (2007) compared their own calculation to the HDI values of other authors, emphasize the work of Nemes Nagy, in which the data of Szabolcs-Szatmár county from 1990 (0,029) can be acceptable hard. The application of different methods led to this significant deviation.

In our own research (2007), in which we studied the inner cohesion of the counties with the help of the small region HDI, it was proved that the lower the value of county HDI is, the biggest the heterogeneity is between the small regions. (And this is true inversely too.)

In Czech Republic the HDI is counted modified and the regional quality of life index is counted to county level. (HUMAN DEVELOPMENT REPORT THE CZECH REPUBLIC 2003). Modifying the content of the three part index, the index of the long and healthy life, education what establish the creative life and appropriate quality of life were founded. All three indexes compact further indexgroups; among other things the main attributes of demography, crime, environment, family and social cohesion, economic efficiency and social status. The stereoscopic distribution of the index follows the centre-periphery model, the centre is Prague and the surrounding counties, both the Western and the Eastern regions from the periphery.

In the level of global European regional (NUTS2 level) human development analyse can be found. With the leadership of Nordregio research institutes a study was made (Regional disparities and Cohesion: What strategies for the future 2007) for the European Parliament in the matter of regional development. The regional policy with a corrective intent integrates its indicator supply, the already extant indexes what express regional cohesion (per capita GDP and unemployment rate), the index of rate of higher educated people and life expectancy at birth into a so called European Regional Cohesion Index. With the help of the index what was created by multivariate statistical methods (principal component- and cluster analyses) 7 types of cluster were formed with the object of standardization. Two low, two medium and two developed groups were worked up, as the function of the deviation of the given index how maintain a relation to the average.

Examining the regional position of the new member countries we can see that extremes describe the areas. We can find areas from the most developed group(only two regions – Prague and Bratislava), or the other end is typical. We can find two transitory – medium developed – regions. The ranking is owing to the higher education level of Estonia and Lithuania and to the smaller deviation of from the average of the other indexes. Comparing the examinations with the European configuration model (Probáld and Szabó 2005, Szabó 2007, Nagy 2006) and this regional human development map we don't find always a strict coincidence between the economic and human development, maturity. The biggest similarity can be experienced with the economic regions what are more developed than the average of EU (25) with a smaller-bigger deviation and were reported by PROBÁLD and SZABÓ. At Nagy's (2006) version there are 25 regions and the Blue-banana[12] is mainly

[12] It can be seen more clearly that the traditional centre of Europe can be found in the Paris-London-Amsterdam triangle, to which we can include the Ruhr-district and this is called "Blue-banana". This development zone can be considered unified and in this of course there are developmental differences. Besides the economic agglomerates of big cities after the World War II. the Munich-Stuttgart-Milan developing triangle was formed and this like a new gravitational centre includes the modern industries, mainly the motor car reproduction and electronical industry. (EUROPA 2000)

based on economic indexes but the regions which have excellent human resources values cover a bigger area. The Central-European boomerang[13] (or yellow banana) can't be revealed regionally. It can't be forgotten that this can't be possible because the analyse of the two regions (EU15 and new accession countries) wasn't happened separately, but within the frame of one inquest. So among such circumstances of the analyse nearly all regions of the new accession countries represent the Eastern wall of the human development.

In the same way as in the global HDR[14] from 1993 we can find human development analyse and it refers to the biggest minority of the region. The Roma Human Development Report 2003 shows that 4-5 million people from the region suffer from nearly the same living conditions in consideration of illiteracy, infant mortality and malnutrition as the Subsaharan Africa. Dirk Westholf demographer estimated the HDI value of Romanian Romas by 2000. According to him the life expectancy is 63-64 years, 35% is the rate of those people who can read and write and the per capita GDP is one-third of the country average. The value of this calculated index is 0,570 and this is between the performance of Zimbabwe and Swaziland. (UNDP 2003)

The gathered Roma population in South-Slovakia is not in an easier situation either. In 1998 according to the official statistics roma men live less with 13 (life expectancy is 55 years), while roma women live less with 17 years (life expectancy is 59 years) compared to the national average. 80% of the roma population depends on the state redistribution. The long distanced and permanent unemployment is an expansive occurrence among the romas. (NATIONAL HUMAN DEVELOPMENT REPORT SLOVAKIA 2000)

Regional application of HDI

Maintaining the three dimensions which signify development, altough a bit modified, we created the following socially disadvantaged indexes:

- index of life expectancy at birth
- qualification index
- income index

Extreme values were determined to define the socially disadvantaged indexes which were counted from components:

- in the life expectancy at birth case: min. –25 years, max. –85 years;
- in case of measuring of knowledge: both at the illiteracy index and gross schooling rate min. –0, a max. –100%;

[13] According to the Varsovian Grzegore Gorzelak the winner and the defeated regions of transition from the planned economy to the market economy follow the traditional West-South developmental division of East-Central Europe. The defeated regions in the Eastern borderlands of Poland, Slovakia and Hungary form a connected underdeveloped zone, an "eastern wall", while the winner regions usually can be found in the Western part of East-Central-Europe. This "boomerang" is not a unified formation, because in it the private areas get a favoured part, Prague and its environ, and the Budapest-Győr-Bécs-Pozsony quadrangle, where the market economy transformation was the fastest and became growth regions by this time. (Cséfalvay 1999). We have to add that the territory of the boomerang get larger, become deformed; Bucharest and Slovenia joined also to this stereoscopic developing unit. (Egri and co-author 2006)

[14] In 1993 the HDI from the living persons from the USA was decomposed to ethnic groups (white, black and Spanish-speaking) and genders. The Afro-American population who live there, in 1990 they lived on the stage of Hungarian development.

- in case of living standard: min. –100 USD, max. –40.000 USD. (HDR, 2006)

In this study the calculation method before 1994 was adopted. On the one hand we didn't want to use those extreme values which are in use in the world: certain indexes are different from the components of the original HDI, as well as the minimun extreme values can't be used in the developed countries. We didn't want to require an arbitary determination. On the other hand we didn't posses data relating to more years, so we can't compare the changes in time, for this reason the extreme values aren't needed (temporarly). In this way the value of HDI verify the position of certain areas which are compared to each other. (And the limited suitability appears here.)

$$I_i = \frac{X_i}{X_{max}} - \frac{X_{min}}{X_{min}}$$

where X_{max} and X_{min} are the two extreme values of the index, X_i is the index of the ith country or regional unit. But this formula is only suitable to count the life expectancy and qualification index. To the calculation of income index we used the following formula.

$$W(y) = \frac{\log y}{\log y_{max}} - \frac{\log y_{min}}{\log y_{min}}$$

The life expectancy at birth: Certain countries report the values of life expectancy at birth to their different regional units. The source of data is the reports of National Statistical Offices and these are valid for 2003-2005. (For this reason the three years average.) Although the index is counted from the mortality tables with same methods, as a comparison we ran down a correlation analysis to study the connection between the standard mortality rates and the life expectancy indexes. The result is very close (0,98-0,99) and generated a positive connection.

The qualification index: Agreed with the studies which were directed by NORDREGIO (2007) and Józan's (2008) researches we consider the rate of college or university qualification as a significantly differentiated index-number and this is suitable for demonstrating the differences in the knowledge base. In our previous studies we applicated the enrolment rates too, but the consumed effects of educational centres get across more powerfully in regional level. The case of Prague is an approprite example on this point, where the gross enrolment rate of 5-24 years old people is 110%, while in the sorrounding regions (Central-Czech Republic) this is 60%. On the other hand if we study in this regional level the enrolment rate in higher education only, we can experience more extreme connections: the value of Prague is 37% and 2% of Central-Czech Republic. In that region which includes all of the capitals the enrolment rate of higher education is 30 or

higher, most people study in Bucharest. (Nearly 43%.) The educational life expectancy can't be attained in this regional level.

In the present section the data are from the statistical supplement of the Fourth Report on the economic and social cohesion (2007) and concerns the agegroup of 25-64 years.

The income index: The Statistical Office of EU reports among other things the available income data of households per capita retroactively. The available income includes the factor incomes which were gained by the households (wages, interest income) the welfare benefits and handovers, but from this we deduct the taxes what are paid by households and the contributions. The rate of the available income compared to GDP reflects also that how big the extent of central withdrawal is. The share of the centralizated income (what part of GDP is deducted from the income by the state) is different from county to country. (KSH, 2003.) The determination of this index is due to the consumption, so the comparing of entities is occurred with the help of purchasing power consumption standards (PPCS) differently from GDP.

The index of human development is given by the arithmetical mean of three part-indexes. The extent of this index can take values between 0 and 1. According to the ranking of regions above 0,600 high, between 0,350 and 0,599 medium, under 0,349 the certain region can be characterized with low human–resource attributes. The average value of the index is 0,415. The human-resource supply of the studied region is very heterogeneous, the value of standard deviation[15] is 47,9%. It is worth to mention the rates of the maximum and minimum values hightening the extremes, according these we can discover a 17,8-fold difference between Prague and the Romanian Nord-Vest.

On the basis of the stereoscopic managed inquest "the first law of geography" (Tobler 1970) works in the case of this index too, whereas "everything is in close connection with everything but the interference of those things which are close to each other is stronger." The strength of that correlation coefficient what is supplied us with the numerical values of the adjacency relations is medium and its direction is positive. The extent of the regional autocorrelation[16] is medium, so the regionalization appears but in a satisfactory level

[15] The standard deviation shows the compared value of the deviation to the average of the studied data range.

[16] During the inquest of the regional segregation that question comes up that how close the connection is between the geographical nearness and the heterogenity of the observed figure. In so far as the occurrence of a figure (for example: high per capita income) in a certain country it is in close connection with the per capita income of those countries what can be found close to each other geographically, so we can say the per capita incomes of those countries what can be found close to each other geographically move together and have an effect on each other. In case of positive regional mutual influence the observed figure is the assimilation. This time the vicinity moves to the direction of assimilation, the near areas have the similar income level. In case of constancy of this effect the given figure is so called regionalized. I.e. the studied district can be divided into such geographical regions where the probability of occurrence of the given figure or intensity (for example the level of the per capita income) is similar and this differs essentially from those observed values which were studied in other regions. (Major 2001.) The index is the result of Pearson correlation factor, where we considered the relation between the original index and the average of neighbouring regions. The value of the factor is 0,59.

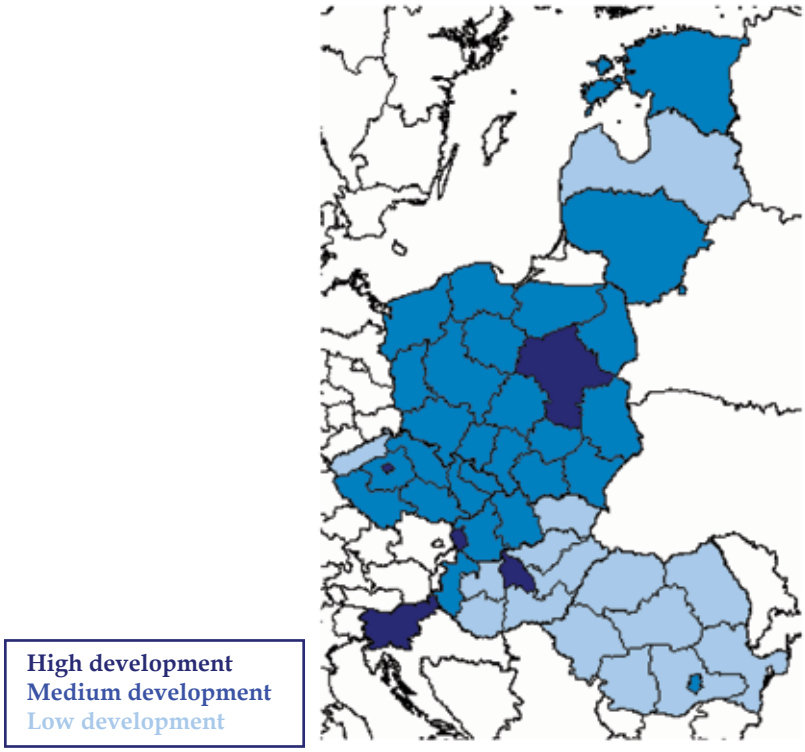
In accordance with Obádovics's (2003) examinations, we determined the HDI means in conformity with rurality. In pursuance of these a HDI differentiation in agreement with the nature of rurality can't be proved. The average of essentially urban regions is 0,695, but in the typically rural surface it is 0,334, while in the essentially rural areas the average value is 0,408. Prague takes pride in the greatest valu, except the education, it is the first in all of the developmental dimensions. The following is Bratislava, Slovenia, Central-Hungary and the voivodship of Mazóvia which includes Warsaw too. The Romanian regions represent the extremity value except Bucharest.

The "focus points" of Central-European boomerang can be seen clearly on Figure 1., only Bucharest is missing from the winner regions what are rich in human-resourcesbut this is way above from the Romanian regions. (The value of Bucarest is 0,515 while the average of others is 0,082! The difference between the lowest developed Nord-Vest and Bucarest is tenfold.) The cause of backwardness of Hungarian regions what have low human resources-features is the life expectancy. The same trends are illustrative of Latvia, while the cause of backwardness of Czech and Slovakian regions is the qualification. The heterogenity of the medium developed group is caused by the margin of education level, in Estonia can be found the most people of a higher degree, the life expectancy is similar to the Hungarian, Latvian and Lithuaninan position. In the third, developed group the life expectancy at birth differs to the highest dethe highest degree, the Hungarian central region gives the negative extreme value.

There isn't an automatic link between the economic growth and human development. This relation can be strengthened by clear, political interferences. The human development – beside many other thingd – demands significant educational, health and provisions investments. The result is a more healthier and better educated population who is more generative economically. In fact, numerous modern growth theories explain the economic growth primary, as the consummation of human capital. The link between the human development and the economic growth can strengthen and weaken each other. The HDR from 1996 brings two kinds of country out in bold analysing the relation between the GDP and HDI. One of them is using its income to turn it into abilities (originated the effect of human development of efficiency) and the others who aren't capable of doing this and they have effectiveness deficit. Canada, China, Costa Rica, Sri Lanka and Malayzia belong to the former group. Italy, Botswana and Maurities represent the others. (HDR, 1996)

It is worth to consider the relations of there two indexes in regional level, mainly because of the earlier pointed and outsanding part of the GDP, whereas this is the index of the development and the foundational of the development possibility in regional level. Just as well as it is published in annual reports, we tell the relations between the HDI and the ranking of per capita GDP. The data of GDP are the average of 2003-2005 years in accordance with the HDI.

Figure 1. The territorial situation of human development



Source: own calculation and construction (2009)

We can experience significant spreads in the ranking, with deviation of both directions. The difference is significant in the case of Polish regions, in the voivodship of Little-Poland, Podlasie, Opole, Lublin, Sub-Carpathia and Świętokrzysk. In these the regions accordingly the human resource index are on a much more favourable place, as in the case of that index what shows the economic development. The regions are handed to a much more favourable place with nearly 20 positions. After the EU extension in 2004 – forming the Eastern wall too – the voivodship of Lubusz and Sub-Carpathia provided the lowest economic output in the integration of that time (33% of the EU average), in the human resource order they are the 23rd-24th. Estonia, the voivodship of Pomerania, Warmia-mazúria and Central-Moravia have significant reserves and efficiency. The Czech South-East region and the Romanian South-Wast Oltenia and North-East got into a more advantageous position.

The Czech North-West, Central (both are backward with 10 positions in the HDI ranking), West- and South Transdanubia, Morva-Silezia, Latvia, South-Plain, Central- and West Slovakia and Central Czech Republic ended an essentially unfavourable position and they have effectiveness deficit. The capital

regions, Czech North-East, Silesia, Lithuanis, the Romanian Central, South-East and south-Mutenia have the same economic and human achievement (KÁPOSZTA-NAGY-VILLÁNYI, 2008).

Testing that how big is the influence of output index on the human resource development we ran down a regression analyses; in compliance with it the per capita GDP is the independent variable, the HDI is the dependent variable. The logarithmic regression equation provided the best interlocking, the determination extent is 72,86%. This means also that the occurrence of the decreasing margin interest appears, the high economic achievement doesn't explain the attainment of human progression in the same extent, with unexpected success. Controlling the 27% residuums provided important information. After a small transformation (after take the logarith of per capita GDP) we formed the previous equation into a linear. Medium extent autocorrelation can be discovered and the value of correlation factor is 0,60. In Fig. 2. the map of regional distribution of residuums can be seen. This figure doesn't tell us more information than the Table 1., the visual representation of this special relation. Adopting 4 categories "the Easter wall" is outlined sharply.

The analyse of residuums aren't (can't be) stopped here. Controlling the effects of certain part indexes we ran down a multivariant regression analyses: the values of residuum are the dependent variables, the independent variables are the index of income, qualification and life expectancy.

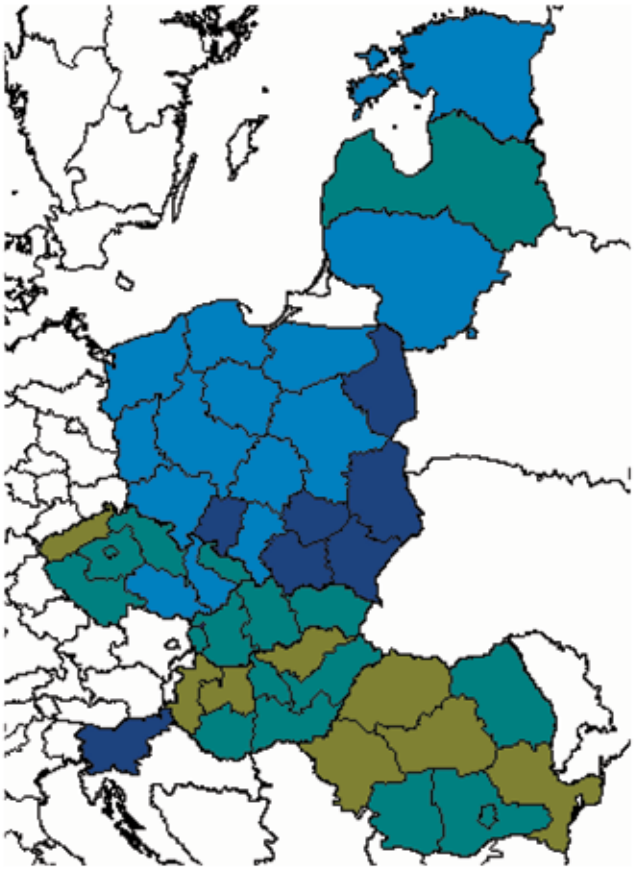
Table 1. The correlation of HDI and per capita GDP

code	name	HDI	GDP	HDI-GDP
cz01	Prague	1.	1.	0
sk01	Bratislava	2.	2.	0
si	Slovenia	3.	4.	-1
hu10	Central-Hungary	4.	3.	1
pl12	Mazóvia	5.	5.	0
cz06	South-East	6.	8.	-2
ee0	Estonia	7.	16.	-9
pl21	Little-Poland	8.	31.	-23
ro32	Bucarest - Ilfov	9.	9.	0
cz07	Central-Hungary	10.	15.	-5
cz03	South-West	11.	7.	4
cz05	North-East	12.	11.	1
cz02	Central Czech Republic	13.	6.	7
pl63	Pomeránia	14.	22.	-8
pl41	Great Poland	15.	19.	-4
pl34	Podlasie	16.	39.	-23

pl51	Lower Silezia	17.	20.	-3
pl22	Silezia	18.	17.	1
pl33	Swietokrzyski	19.	37.	-18
pl42	West-Pomeránia	20.	23.	-3
lt0	Lithuania	21.	21.	0
pl52	Opolei	22.	34.	-12
pl32	Sub-Carpathia	23.	41.	-18
pl31	Lublin	24.	42.	-18
hu22	West-Transdanubia	25.	10.	15
pl61	Kujávia-Pomeránia	26.	29.	-3
cz08	Moravia-Silezia	27.	12.	15
pl11	Lódzi	28.	26.	2
pl43	Lubuszi	29.	28.	1
pl62	Warmia-Mazúria	30.	36.	-6
sk02	West-Slovakia	31.	18.	13
sk03	Central-Slovakia	32.	24.	8
cz04	North-West	33.	13.	20
hu21	Central-Transdanubia	34.	14.	20
lv0	Latvia	35.	25.	10
sk04	East-Slovakia	36.	32.	4
hu33	South-Plain	37.	30.	7
hu23	South-Transdanubia	38.	27.	11
hu32	North-Plain	39.	35.	4
hu31	North-Hungary	40.	33.	7
ro12	Central	41.	40.	1
ro42	West	42.	38.	4
ro41	South-West Oltenia	43.	45.	-2
ro22	South-East	44.	44.	0
ro21	North-East	45.	47.	-2
ro31	South - Muntenia	46.	46.	0
ro11	North-West	47.	43.	4

Source: own calculation, construction (2009)

Figure 2. The regional distribution of regression residuums of per capita GDP and HDI



Source: own calculation, construction (2009)

The linear regression equation is reliable statistically, the extent of determination is high (R2=0,736) and positive. The standardized beta coefficients express the strength and direction of those elements what make an impress on the dependent variables. According to the results the dimensions of the non-market development move together with the regression residuums, while the economic index has a contrasting sign. This means that the extent of the divergence between the GDP and HDI is influenced by dimension of non-market development and it has a compensate effect. But this occurrence is true inversely, too (KÁPOSZTA-NAGY-ÖKRÖS, 2008).

The life expectancy at birth explains the residuums to a larger extent. Its sign is positive, where there is a significant difference between the GDP and HDI there the deviation, the values of residuums are determined by the life expectancy to a significant extent. It can be discovered in case of the previously mentioned Polish voivodships, for example: in the region of

Sub-Carpathia, Podlasei, where the index what shows the health condition comes near to the developed regions. (For example: Prague and Slovenia.) But in the same way it has a big effect in the more undeveloped regions, for example: Central-Transdanubia, Latvia and South-Transdanubia. Significant difference can be seen in the Romanian West- and North-West regions.

Table 2. The main results of multivariant regression analyses

Independent variables	Standardized regression coefficients	Significance
Life expectancy	1,052	0,000
Income	-0,790	0,000
Qualification	0,529	0,000

Source: SPSS, own construction (2009)

Conclusion

In this study we did the elaboration of the technological literature of human developed index and adopted it into regional level. The purpose of the calculation of modified HDI to the subnacionalist level is in the one hand to prove the regional differences, on the other hand to analyse its connection to the GDP/capita (this index determines the development of the Regional Development Policy of the EU). Significant differences can be discovered not only in the studied entities but inside of certain countries, too. In fact the winners are the capital regions; the defeated regions are the Hungarian-, Romanian- and Latvian regions. Significant inconsistency can be seen in regional level too, between the economic and non-economic factors.

The most of the Polish regions convert their economic achievement very effectively into human development (Little-Poland, Podlasie, Sub-Carpathia, Lublin and Swietokrzyski), while the Czech North-West, Central-, West- and South Transdanubia have effectiveness deficit.

The multiple regression analyses showed that fact that the non-economic type developmental dimensions have a significant compensate effect to counteract the low economic achievement, and this occurrence is true inversely, too. Central-Hungary is an example onto this, it includes Budapest where the income index is the second, while the life expectancy index has values under the average. And it can be expressed that the complex index gives a more shaded, more complex image about the regional development than GDP does.

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