ABSTRACT - The paper presents the actual state and condition of territorial inequalities at the Romanian-Hungarian border region, which shows - at present - an evident advantage of the Hungarian side, from the point of view of complex socio-economical aspects. This advantage is especially outstanding for the Hungarian side in the field of infrastructural supply (drinking water, natural gas, and public sewage networks), but it is valid for some characteristics of human capital, too, (above all, with regard to the illiteracy rate and the proportion of highly skilled persons with bachelor degree). Despite these difficulties, these inequalities are not insurmountable and should not affect efficient cross-border cooperation between the two countries. This regional inventory facilitates the evaluation of the starting-point of this kind of cooperation and also depicts some aspects of the interregional cooperation of the four counties north of the Romanian-Hungarian border region which belong to the Carpathian Euroregion.

Key words: Euroregion, regional disparities, socio-economical index figures, vital statistics, human resources, infrastructure, border line

The aim of this study is to reveal, through several social and economic factors, the bases of cooperation in the Romanian-Hungarian border region of the counties Bihor and Satu-Mare (which are in Romania) and Hajdú–Bihar and Szabolcs–Szármá–Bereg (which are in Hungary), as well as making a regional inventory of the social and economic background of this cooperation. We have analyzed primarily indicators influencing demography, economics, and living standard. The case study also indicates, considering the above-mentioned points of view, the territorial inequalities which appear because of the border. Furthermore, we also focus on the internal territorial differences of the four counties, which appear mostly as the city – village dichotomy.

The four counties have a peripheral position but their socially and economically peripheral character is also highlighted. This is primarily valid for Szabolcs–Szármá–Bereg County if we take into consideration its backward situation in Hungary. Hajdú–Bihar County has an economically more favourable situation - it is a moderately developed county – because its municipality, Debrecen, is the second largest city in Hungary.

Table 1. The main features of the Romanian counties taking part in this regional cooperation, 2002

<table>
<thead>
<tr>
<th>County</th>
<th>Total population</th>
<th>Cities %</th>
<th>Villages %</th>
<th>Romania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihor</td>
<td>600242</td>
<td>49.5%</td>
<td>50.5%</td>
<td>21.6 million</td>
</tr>
<tr>
<td>Satu Mare</td>
<td>367281</td>
<td>46.4%</td>
<td>53.6%</td>
<td>238000</td>
</tr>
</tbody>
</table>

Table 2. The main features of the Hungarian and Romanian counties taking part in this regional cooperation, 2001

<table>
<thead>
<tr>
<th>County</th>
<th>Total population</th>
<th>Cities %</th>
<th>Villages %</th>
<th>Hungary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hajdú–Bihar</td>
<td>545700</td>
<td>75.6%</td>
<td>24.4%</td>
<td>10.12 million</td>
</tr>
<tr>
<td>Szabolcs–Szármá–Bereg</td>
<td>572500</td>
<td>46.6%</td>
<td>53.4%</td>
<td>93032</td>
</tr>
</tbody>
</table>

1 “Babeş-Bolyai” University, Department of Physical Geography, Faculty of Geography, Clinicilor Street, no. 5-7, 400006 Cluj-Napoca, Romania.
E-mail: enagy@geografie.ubbcluj.ro
In Romania, Satu Mare County can be considered a moderately developed county as the interest of the foreign investors is increasing because the county is relatively closer to the European Union and its infrastructure is better than the Romanian average. The same is valid for Bihor County as it has a far better position from the point of view of traffic and transportation. Furthermore, the municipality of Oradea improves the county’s position as it belongs to the second category of cities in Romania’s settlement hierarchy and it is a first-rank regional centre.

The four counties have developed a complex system of relationships as active cross-border cooperation. The people who take part in this cooperation are mainly the Hungarians living in the Romanian area of the cross-border region, primarily those living in the southern part of Satu Mare County and the Hungarians and Germans living in the northern part of Bihor County (the linguistic, cultural and socio-communicative dimensions of these relationships are mainly emphasized). Unfortunately, as previous studies have shown it, these relationships are one-sided and they are limited to the relationships between the Hungarians from Hungary and the Hungarians from beyond the borders (Baranyi B., 1999).

Figure 1. The Density of Population in the Counties of Bihor and Satu Mare (RO, 2002), Hajdú-Bihar and Szabolcs-Szatmár-Bereg (HU, 2001) at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt).
The population density map highlights the poles of increase (mainly cities), but the fast growing rural areas with large population outflow and less possibility to keep this population up are also shown on the map (the Land of Oaş – northern mountainous rural part of Satu Mare county, Szabolcs–Szatmár region in Hungary).

From the point of view of the population increase, we can affirm that the contrast between the fast growing Romanian settlements in the northern, north-eastern region (Oaş) and the settlements with older population in the southern part of the area characterizes the situation of Satu Mare County. Bihor County, except for a few island-like settlements at the foot of the mountains or hills, is heavily losing its population. On the contrary, Szabolcs-Szatmár-Bereg county in Hungary generally grows faster, except for the border regions with Romania and Ukraine. Consequently from the point of view of population increase this county cannot be described as a demographic periphery. In the Hungarian area the fastest growing small villages have a larger proportion of Gypsy population. This is obvious mainly in the Szatmár–Bereg region (east,
southeast). In Hajdú-Bihar county positive rates of population increase are observed in the central and the northern region, as well as in some eastern, border regions where there are, settlements which have a larger number of Gypsies.

Figure 3. The Average Migration-Balance in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU) Bihor and Satu Mare (RO) for the Period 1990-2002 at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt).

The negative balance of migration is evident, with some exceptions, in the Hungarian border region and on the Romanian-Ukrainian border as well as on the periphery of the eastern, hilly area of Satu Mare County (the Culmea Codrului). An obvious phenomenon on both sides of the border is the positive balance of migration of the larger villages near cities, a phenomenon which could be the marker of gradually intensified suburbanization. In Bihor County the eastern and south-eastern mountainous regions have negative migration balance, whereas in Hajdú-Bihar County, Hortobágy region and the southern periphery have less possibility to maintain their population (inner peripheries without cities).
From among the items of population structure we analyzed those which influence the state of human resources, are related to the level of education, the age structure of the population, and thus may outline the future of the workforce market.

In this respect, it is very important to analyze the proportion of the young and the aged population. The structure of the young population observable in the northern villages of Satu Mare County, and in the villages with larger Gypsy population on the Hungarian side of the border form a coherent line in the region of the triple border. In contrast to this appears the situation of the aged population highlighting the southern and eastern parts of Satu Mare and Bihor County, as well as in broad lines the entire border region of the Hungarian side. In these villages the number of aged population is extremely high, it exceeds a quarter of the total population, and there is the possibility that these settlements will die out.

Figure 4. The Proportion of the Young Population (between 0 and 14 Years) in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU, 2001), Bihor and Satu Mare (RO, 2002) Counties at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt)
From among the indicators of education level we operated with those describing illiteracy and higher education level (high school and university). The proportion of illiterate people in Hungary is applicable to the population over 7 years, while in Romania to the population over 10 years, consequently, it is more difficult to compare these values. However they describe very well the disadvantaged areas on both sides of the border. In Satu Mare County these areas are the northern border periphery and inner peripheries. In Bihor County the disadvantaged areas are the southern and eastern mountainous regions and the northern areas where Gypsies are present in larger numbers. In the case of the Szabolcs- Szatmár- Bereg area, it is again the region of the eastern and northern border that is disadvantaged, as well as some settlements where Gypsies live in larger numbers, around the city of Mátészalka. The same is valid for the Hajdú - Bihar County where the border region is in a difficult situation. This indicator highlights especially the disadvantaged situation of

**Figure 5.** The Proportion of the Aged Population over 60 Years in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU, 2001), Bihor and Satu Mare (RO, 2002) at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt)
the Gypsy minority in both countries. Their lack of education and their discrimination as workforce create a vicious circle difficult to solve.

We encounter difficulties when comparing the values of university and high school graduates in the two countries as this value is applicable only to the population 25 years older in Hungary and 10 years older in Romania. Consequently, the Hungarian counties might appear in a more favourable situation. However, it is observable that cities have a better situation as far as the proportion of the high school or university graduate population is concerned.

Figure 6. The Illiteracy-Rate in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU, 2001), Bihor and Satu Mare (RO, 2002) at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt)
Figure 7. The Rate of University and High School Graduate Population in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU, 2001), Bihor and Satu Mare (RO, 2002) at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt)

From the point of view of the number of households connected to the public water supply system the Hungarian settlements are relatively homogeneous and have a far better situation than the Romanian ones. From these data we can conclude that in Hungary the extending network of the public service system represents an increasing problem with negative effects upon the environment because of the lack of the public sewage system in more households. The settlements near the border in Hungary are only relatively disadvantaged from this point of view, while in Romania the situation can be described by the urban – rural area gradient.
In Hajdú-Bihar County the most important foreign investments were in the pharmaceutical industry in the case of Biogal Ltd. from Debrecen, which was bought by the well-known Israeli TEVA. In addition, there have been investments in the electronic industry (General Electronic Lightning Tungsram Ltd. in Hajdúböszörmény produces light bulbs), National Instruments, an American electronic company has a site in Debrecen. We also have to mention FAG Automotive Hungary Ltd. which produces ball bearings and which privatized, through South-Korean investment, the former ball bearing factory of Debrecen.

In Satu Mare County, in the town of Carei (Nagykároly) the local edible oil factory was bought by a foreign investor. A significant investment on the Hungarian side in Tiszavasvári occurred when an American investor bought Alkaloida Co., a medicine producer. Other important investments were made by the American Flextronix computer company in Nyíregyháza and by the German Karl Zeiss Company, which produces eyeglasses in Mátészalka. The latter announced in the second half of 2005 that more producing sites would be installed in Mátészalka, delocalizations from Germany. To all these, we have to add average
investments, such as the ULT Magyarország tobacco company in Nyíregyháza; the Italian Benetton textile company in Nyíregyháza; the MSK Hungary company, which produces packing machines and transportation utensils in Nyírbátor and the INTERSPAN Ltd. in Vásárosnamény, which produces veneers. An important investor in Satu Mare is the German Drexlmaier company producing machine spare parts, a branch of industry very widespread nowadays in Romania.

Among the best examples of foreign investments in Bihor County we have to mention the electronic industry, as the Canadian company CELESTICA has built a factory in the western industrial park of the city. This investment will have been finished by the year 2006 when the American company ARTESYN will invest millions of dollars to produce electronic equipment for the telephone industry in collaboration with CELESTICA facilities. To exemplify the mobility of the foreign capital caused by the continuously changing relationships in the world market we have to mention that ARTESYN will create 300 jobs at Oradea by
relocating its facilities from Tatabánya, Hungary. Another major investment in Bihor County was the privatization of the cement factory at Chiștag, near Aleșd, by the Swiss HOLCIM company.

On the Romanian side of the border there are many light industry investments in the textile and shoes industry, which produce small added value, use hired workforce and rely on Italian and German capital.

**Figure 10.** The Rate of the Households Connected to the Natural Gas Distribution System in the Counties of Szabolcs-Szatmár-Bereg and Hajdú-Bihar (HU, 2002), Bihor and Satu Mare (RO, 2002) at Community Level. (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt).

Most of the companies relying on foreign investments focus on export. They are the driving force of the sustainable industrial development which produces no debt and, thus, becomes vital for the two countries, Romania and Hungary which have small domestic markets and are open towards the world market. The larger amount of the FDI stock of the Hungarian county is significant from another point of view, namely that this is the most disadvantaged county of Hungary. This is because, in addition to the favourable investment environment, the county was connected to the development circuit through a highway,
which will reach the county seat, Nyíregyháza, itself, by the end of 2007. The proportions reflect the situation of the two countries: in Hungary by the first half of 2005 there had been 52 billion euros as FDI stock, while in Romania by the same date there had been 15 billion euros. In the past few years the capital flow towards Romania had increased as privatization paced up. Thus, in 2004 Romania was on the first place in the CEE region with a 4.1 billion euro direct foreign capital flow.

![Figure 11. The FDI-Stock Level in the Counties of Bihor (2004), Hajdú-Bihar (2001), Satu Mare (2004) and Szabolcs-Szatmár-Bereg (2001). (Maps made by Bartos-Elekes Zsombor and Magyari-Sáska Zsolt)](image)

As far as the localization of foreign investments is concerned, we can affirm that their concentration is significant. Most of them are concentrated in the urban areas of the four counties, perhaps in one or two larger and more successful villages which have more qualified workforce, or are better localized from the point of view of transportation networks or have important local natural resources.
CONCLUSIONS

In Romania, as in most of the transition economies and the Third World, the regional developmental differences are more significant between the different categories of settlements (the urban-rural gap) and the interregional developmental differences are not so easily observable.

Regional disparities primarily start to develop when economic growth resumes after economic change or stagnation (in Romania this process is intensifying). The duality of more developed and less developed regions appears more obviously afterwards while the developmental differences between cities and villages gradually lose their importance. Development begins spreading as a network, serving as an equalizer of regional differences (this is more characteristic for the mature market economies).

In Eastern Hungary the socio-economic indicators show that the border region in an obviously disadvantaged place thus underlining the territorial and economical periphery status of the settlements in this area. The unfavourable situation of the villages in this area can be explained by the loss of their centre of attraction due to the stipulations of the Peace Treaties in Paris following World War I. In contrast to this in Romania the border region is the most developed as it overlaps the western urban lane and the relatively developed linear infrastructure. Here the extended disadvantaged country regions function either as inner peripheries or appear on the eastern, north-eastern periphery of Satu Mare County or in some isolated mountainous or hilly regions.

Thus the main regional developmental differences appear at the following territorial levels:
- Between the urban and the rural areas, in favour of the urban areas on both sides of the border
- Between the regions closer to the border and the inner ones, in favour of the latter, in disadvantage for the Hungarian border region;
- Between the regions closer to the border and the inner ones, in favour of the former, in disadvantage for the inner region on the Romanian side of the border;
- Between the four counties, in favour of the Hungarian ones.
- A demographical separation line is also observable, which divides Satu Mare County into a dynamic northern part and a stagnating – regressive southern part exactly in its median area.

REFERENCES


BARANYI BÉLA (1999), A „periféria perifériáján” – a határmentiség kérdőjelei egy vizsgálat tükrében az Északkelt-Alföldön, in: Tér és társadalom, Győr, MTA-RKK.

COCEAN POMPEI (coord.) (2004), Relațiile transfrontaliere ale județului Satu Mare ca premisă a integrării euro-regionale, Proiect PATR, Cluj-Napoca.

GRIMM FRANK-DIETER (1998), Auswirkungen der Grenzöffnungen der 90er Jahre, Geographie und Schule, Aulis Verlag, Köln.

