IMPLICATIONS OF RURAL AREAS AND DEMOGRAPHY IN THE DÉL-ALFÖLD REGION

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Abstract - Implications of Rural Areas and Demography in the Dél-Alföld Region
This present essay of mine examines demographic aspects of the Dél-Alföld NUTS 2 level region. Having read relevant scientific literature, I define the urban and the rural territorial units, making it possible to examine the qualities of such categories. Micro regions constitute the fundamental units of my research.
Micro regions then are subjected to factor-analysis with an emphasis on the demographic conditions. My analysis is descriptive and it seeks for the understanding of the complexity and diversion of current demographic processes in the area. The contrast of urban and rural prosperity is highlighted. My analysis investigates a complex and important current issue.
Keywords: rural areas, demographic analysis, complexity, Dél-Alföld region

INTRODUCTION

Omnipresent processes of urbanization that has been occurring continuously since the beginning of the twentieth century has two particular characteristics in terms of territorial structural aspects. These are the urban and the rural qualities (CSATÁRI 2001). CSATÁRI (2000) states that global urbanization does not benefit evenly these as the latter is always at the "far end" of the processes, in other words, it is the looser of globalization.
BARANYI (2004) elaborates that economic transition induces deep territorial crisis which has been on since the transition began. One of the important features of such a phenomenon is the lag of Hungary's eastern half which is represented by countless indicators. Territorial units in Alföld have clear manifestations. Statements of BARANYI (2004) are definitely true for a particular part of Alföld, that is, Dél-Alföld.
In Hungary's current state, agriculture is still a dominant field in comparison to developed Western European countries and regions. In these too rural regions the level of joblessness is high in every age group nevertheless its intensity differs a little bit. What is more, educational attainment is rather low in general. On the top of that, citizens are aging there and the population is decreasing. This decline started earlier in Dél-Alföld than elsewhere in the country and the process has become dynamic since the 2000s (BALCSÓK 2009).
This situation initiates the emerging importance of researches that shed highlight on demography and its changes. Another reason for greater focus on the topic is that demography has a very tight relationship with geography, meaning that economic geography cannot neglect demographic attributes (GYÉMÁNT-KATONA 2010).
Demographic changes are the key ingredient to the understanding and prediction of social changes (AMCOFF-WESTHOLM 2006). AMCOFF and WESTHOLM (2006) believes that it is the age element of societies that lets us read social and economic indicators.

GYÉMÁNT and KATONA (2010) adds the idea that demographic manifestations are outcomes and causes at the same time. However, we cannot consider these two processes as equals, since disposable data show only a moderate correlation between GDP per capita and mortality rate.

AMBROSIO-ALBALA and DELGADO (2008) highlights the importance of societies' participation in rural development when stating that the basis of territorial development strategies should be rural areas as social constructions, concluding from prior development programme failures.

Society and especially the ratio of its components is quite disadvantaged. Small settlements and villages tend to decay with a growing intensity. Furthermore, the inhabitants of such areas make an eroding society technically, that is, a decrease of the population in a way that cannot be stopped, let alone reversed (L. RÉDEI 2001).

This aforementioned process, resulting from demographic structure, is also present in the Dél-Alföld region according to BARANYI (2004) as he examines a greater territory, i.e. the whole Alföld. He concludes that there is no positive social impact in the region apart from local patriotism (both mentality and identity). This emerges a need for the examination of demographic content of the so-called poor rural areas in comparison to urban regions.

MATERIAL AND METHOD

The actual meaning of the quality 'rural' can be defined according to the size, functions, artificial environment of these territories, however, since cities can be defined in a way that is far more obvious, we can consider villages as non-city settlements and rural areas as non-urban areas (CSATÁRI 2001).

Defining the types of the micro regions in Dél-Alföld

The analysis that draws the distinction between rural and urban micro regions (urban/ rural index) can lead to the creation of the type of the micro regions. Figure 1 shows relative number of people living in settlements with a density lower than 120 per km^2.

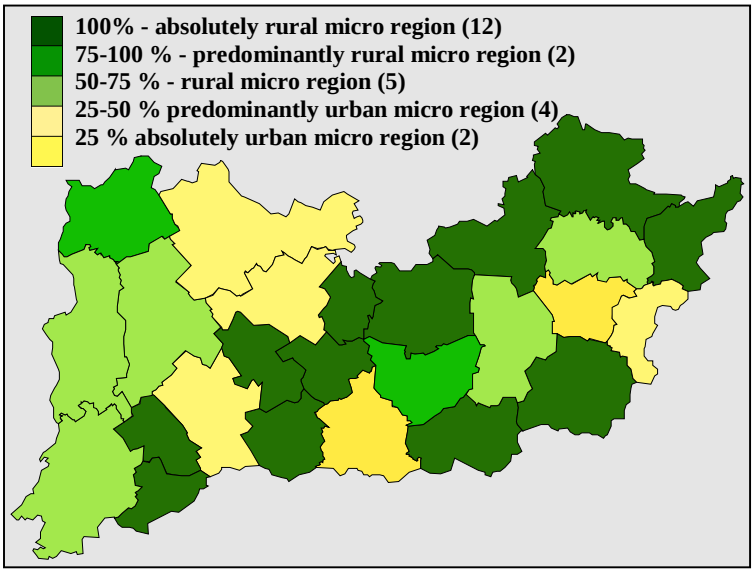

Figure 1: Rural and Urban micro regions in Dél-Alföld in 2009

CSATÁRI (2001) believes that it is reasonable to lower the standard OECD measure from 150 per km^2 to 120 to distinguish between rural and urban areas in the case of Hungary.

By doing so, we can categorize the Hungarian micro regions into these two groups. The index lets us tell the ratio of the population living in a settlement with a population density less than 120 per km^2 in each micro region.
As a result (see Figure 1), the micro regions of Dél-Alföld are categorized either as urban or rural. There are two micro regions which are definitely urban whereas other 4 are city-like. On the other hand, 12 of the total 25 territorial units qualify as absolutely rural. Two of them are particularly rural, while 5 has rural features.

Method of data reduction

I obtained data from the TEIR online database. During the selection of relevant data, I took the *67/2007. (VI.28.) decree as the normative basis*. In practice, Hungarian micro regions are categorized by their state of development and define their need for financial support according to this item (KSH 2008).
None of the five indicator groups included in this decree has a name that indicates demographic content but taking a closer look at each bunch, it becomes clear that demography related data are present and have a quite important role. Furthermore, if we take a look at former decrees *(e.g. 30/1997. (IV. 18.)* or scientific results (CSATÁRI 1999), we find that the then used demographic group of data partly overlaps the ones that are used now, the difference only being their alignment or classification to groups.
This present study involves three indicators from the aforementioned government decree (OGY 2007) with regard to the OGY 1997 and its revision (CSATÁRI 1999).
These are:
1. Migration discrepancy: mid-term average, persons per 1000, 2006-2009
2. Mortality rate (deaths per 1000 inhabitants), pcs, 2009
3. The ratio of the population older than 60 to the whole, %, 2009

I used factor-analysis to process the indicators. This dimension reductive method is typically used when greater number of determinants is at play but it works with my three components as well.
This method has few prerequisites concerning the items to be used, one being correlation between the data. I carried out each of these analyses and the results permitted the use of factor analysis.
For the analysis, I used a statistics software called SPSS which is widely recognised according to the number of works that examine its methodology (KETSKEMÉTY – IZSÓ 2005; LENGYEL – KATONA 1999; NEMES NAGY 2005, 2007). The above mentioned 3 series of data have become one, making it possible to group the micro regions according to their factor value. Then I used EuroOffice 2008 for the depiction of the results.
The most suitable method to categorize the micro regions would have been cluster analysis but in this case, because of the small number of items, I did not consider it reasonable. Those could simply be sorted into five groups based upon their factor values.
I give these groups names: *Most developed micro regions, Relatively developed micro regions, Slightly developed micro regions, Undeveloped micro regions, Most undeveloped micro regions.*
Hence, based on these results, I obtained an extensive picture concerning the demographic qualities of the Dél-Alföld region which also allows me to assess the status of rural areas.

RESULTS

The number of developed (in demographic terms) micro regions in the Dél-Alföld region is very small. Altogether, there are two areas, namely the Kecskemét and Szeged micro regions where demographic conditions are favourable. This actually means that they are far above the average in the region, as they have rather good results in all the three included indicators. Kecskemét micro region leads the list (Table 1), its first place can be attributed to its youthful population, which in statistical terms means a lower rate of inhabitants older than 60 to younger than 60.

Table 1: Demographic rank of micro regions of Dél-Alföld in 2009

Rank	*Micro region*	*Rank*	*Micro region*
1	Kecskemét	14	**Szeghalom**
2	Szeged	15	**Szentes**
3	**Hódmezővásárhely**	16	**Kalocsa**
4	Békéscsaba	17	**Makó**
5	Kiskunhalas	18	**Orosháza**
6	Kiskunfélegyháza	19	**Sarkad**
7	**Kunszentmiklós**	20	**Kistelek**
8	**Mórahalom**	21	**Szarvas**
9	**Kiskőrös**	22	**Bácsalmás**
10	**Baja**	23	**Csongrád**
11	**Kiskunmajsa**	24	**Jánoshalma**
12	**Békés**	25	**Mezőkovácsháza**
13	Gyula		

Source: own calculation from TEIR data

Table 1 shows the demographic rank of all 25 micro regions of Dél-Alföld region, which is based on my multiple analysis of three demographic indicators. Table 1 does not include factor values because those have no numeric meaning but only serve the rank order. Rural micro regions signed bold letters.

The micro region of the third county's centre is the fourth in the list which means to be placed in the next group among four other relatively developed micro regions.

Four out of the total five in this group are micro regions, centred by middle-sized cities: Békéscsaba, Hódmezővásárhely, Kiskunfélegyháza and Kiskunhalas.

Therefore it become obvious that micro regions with greater cities count as developed or relatively developed according to their demographic conditions.

These are similar in a way that their mortality rate and the rate of mature people are not much worse than those of the leaders. On the other hand, their migration balance clearly determines their second-class position. Although this indicator of Hódmezővásárhely micro region is positive, it is only a slight plus, while the other three (Békéscsaba micro region, Kiskunfélegyháza micro region and Kiskunhalas micro region) have negative balance. Interestingly, Kunszentmiklós micro region appears at the fifth place in this second group. Despite the fact that it is only the last one in its group, it clearly belongs there, regardless its rural quality according to its urban/rural index. It can be thus

concluded that despite its rural feature it has almost as favourable indicators as the micro regions which have middle-sized or bigger cities.
The remaining three groups comprise only rural micro regions. These constitute far less prosperous demographic conditions in relation to the former group, a fortiori the first one. Eight micro regions are placed in the group of slightly developed micro regions, making it the biggest group of territories. These are all rural areas, although not all to the same extent. In terms of migration balance, Mórahalom micro region has the only positive value which is not significant. The micro region of Gyula is the second with a slightly negative balance whereas the rest six obviously deal with migration to other areas. Mortality rate can be considered as average in all of the micro regions in this group. Unfortunately though, the rate of the mature population is quite adverse. This is the indicator that determines the position of most of the micro regions (Figure 2).

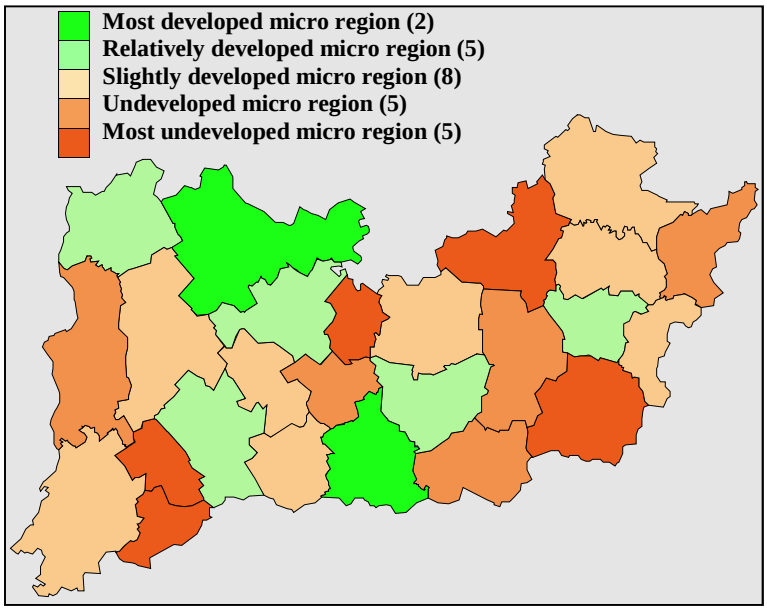

Figure 2: Demographic development of Dél-Alföld micro regions in 2009
Source: own creation from TEIR data

The last two groups include five micro regions each. These are the most undeveloped areas in the territory of my research. The last group contains micro regions with a mortality rates equal to sixteen per mill or higher along with high rates of maturity, numbering nearly a quarter of the population. The group is most heterogeneous in terms of migration, which obviously determines Mezőkovácsháza micro region’s last place.

CONCLUSIONS

To sum up, Dél-Alföld region has absolutely distinct micro regions in terms of demographic conditions according to the urban/rural index. Every urban micro region is situated in the first two categories, indicating their developed features. On the other hand, virtually all rural micro regions appear to be undeveloped or underdeveloped. The only exception to this is the micro region of Kunszentmiklós, which, in spite of being a rural area, it is a relatively developed micro region. Hence its place is among the urban micro regions in the relatively developed group.

The majority of the micro regions in Dél-Alföld can be considered as average. There are only few with outstanding (2 micro regions) or conspicuously weak (5 micro regions) results. All the same, all of these average territory units are rural, which implies the fact that rural features and demographic disadvantages are closely related in Dél-Alföld.
In addition, the difference between rural and urban micro regions becomes even sharper if we consider the absolute lag of the five micro regions in the last group.
The difference is far less vivid between the micro regions of first and the second or the third and the fourth development category. This means the absence of a concrete and general relation between the degree of being developed and the degree of being urban in the case of these relations.

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