DEMOGRAPHIC CRISIS AND RURAL DEVELOPMENT CHALLENGES OF MURALAND – CASE STUDY FROM SOUTH ZALA

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Abstract

As the United Nations points out, 66% of global population will live in urban areas by 2050. Even if the decisive part of this growth will be generated in Asia and Africa, the regional side effects of the global trend and the impact of the Hungarian demographic processes from the last decades cause serious challenges in the sustainability of rural areas in Hungary.

In this respect, one of the most affected area is South Zala (Muraland), where the fertility rate was the lowest in Hungary between the two national general census of 2001 and 2011 due to relatively high domestic migration and population-ageing. Thus, it is evident that the rural society of Muraland is coping with significant challenges in terms of competitiveness and sustainability.

This case study observes the underlying aspects of pro-urbanization factors such as labour and product markets, intermediate services, educational externality, agglomeration side effects, public services, or the stronger projection of self-interest. This way, we can identify the strategic factors that the rural policy must handle to decrease negative impacts of domestic migration.

Keywords: demographic crises, urbanisation, rural development, Muraland

Összefoglalás

Az Egyesült Nemzetek Szervezete statisztikai kimutatásai szerint 2050-re a világ népességének 66 százaléka városi területeken fog élni. Mindannak ellenére, hogy a demográfiai növekedés döntő része Ázsiában és Afrikában fog létrejönni, a globális trend mellékhatásai az európai és magyarországi vidéki területeken a korábbi évtizedekben kialakuló kedvezőtlen népesedési folyamatait fogják a továbbiakban is erősíteni.

E tekintetben hazánkban az egyik leginkább érintett vidéki területként Dél-Zala (Murafölde) azonosítható, ahol a viszonylag magas elvándorlási és elöregedési ráta miatt a 2001-es és 2011-es népszámlálás között Magyarországon a legalacsonyabb népességszaporulati ráta volt kimutatható. Mindebből megállapítható, hogy Murafölde vidéki társadalma a gazdasági versenyképesség és a demográfiai fenntarthatóság szempontjából jelentős kihívásokkal küzd.

A vidéki társadalmak gazdasági és demográfiai válságának perspektívájából esettanulmányunk a vidéki és városi területek közötti demográfiai térszerkezet átrendeződésének mögöttes tényezőit vizsgálja, mint például a munka- és termékpiacok

kiterjedtségét, a közbenső szolgáltatások fejlettségét, az oktatási externáliák szerepét, az agglomerációs szinergiák hatását, a közszolgáltatások versenyképességét vagy az önérdekérvényesítés hatékonyságát. Tekintettel arra, hogy ezek azon tényezők, melyek a vidéki lakosság urbanizált agglomerációk irányába történő elmozdulását eredményezik, így meglátásunk szerint a demográfiai térszerkezetben keletkezett anomáliák csökkentése érdekében a vidékfejlesztési szakpolitikának ezeket a területeket a jövőben szükségszerűen kiemelt módon kell kezelnie.

Introduction

According to the United Nations' statistical forecasts and demographic observations (United Nations, 2014: 7; United Nations, 2015: 38), it is likely that around 60% of the world's population by 2030, and 66% by 2050, will live in urban areas. In this regard, it will reverse the global demographic makeup of rural and urban population that prevailed in the 1950s. Therefore, the exchange of the global proportion of rural and urban population can be described as one of the most important demographic processes of the ongoing 100 years between 1950 and 2050. The scale of this robust transformation is well illustrated by the demographic prognosis that by 2025 the world's 600 largest cities will account for 60% of global economic growth, whilst their population will increase by 60% faster than the global average. As a consequence, 25% of the world's population will be concentrated in the top 600 cities by 2025 (Dobbs et al., 2011).

Due to the global demographic rearrangement, increasing urban concentration of economic functions is expected to escalate social tensions between depopulating rural and overpopulated urban areas. As a result of increasing urbanization pressure and the impact of urban accumulation of decisive economic, social and innovation potentials, a few

scientific analysis (Foley, Rider W et al., 2014; Jeffry L. Miekle, 2014; Moretti, 2014) predicts that social interactions of the future will be embedded in "city state" framework causing the eradication of existing nation state frameworks, where the social and economic role of the countryside will be reduced to a secondary position vis-à-vis the management and distribution functions of urban centers. Marketers are gradually more and more aware of the urgent need to react to this growing urbanisation with integrated marketing communications practices. Integrating communicational messages through several media channels is becoming a challenging task for companies and also for policy makers (Csordás – Gáti, 2013).

Despite the fact that 90 percent of the resources behind urbanization in the next decades will be fuelled by African and Asian societies (Moir et al., 2014: 9), the global demographic rearrangement phenomenon has significant impact also in Europe, thus in Hungary too. All these processes globally have an effect on buying and consumer behaviour, so economic consequences apply significantly (Malota, 2015). Consequently, in order to preserve and maintain the sustainability of the traditional functions of rural areas, it is explicitly necessary to examines the challenges of the Hungarian countryside and the opportunities to manage the obstacles in the domestic context.

In this respect, in Hungary, one of the most obvious research areas is Nagykanizsa and its surrounding South Zala (or Muraland, as it is called recently) proximity, consisting of 90,000 inhabitants, where the decline of rural population in the light of the 2001 and 2011 national censuses is particularly high comparing to national average. This phenomenon can be explained by the crucial consequences of the post-socialist political and economic transformation during the last 30 years. Namely, following the gradual economic downturn of the 1990s and the economic crisis of 2008, Muraland is showing a gradual deterioration

of its population retention power (KSH, 2012a, KSH, 2012b). Arguably, this challenge is directly provoking the marginalization of the region in the absence of appropriate policy responses. Thus, the evaluation and impact assessment of the region-level crisis management approach has a paramount importance to support policy decision making and also contributing to development efforts of rural areas with similar policy challenges.

Materials and Methods

Our study examines the factors that have led to the demographic equilibrium problems of Muraland (South Zala). During the analysis, we relied primarily on the statistics officially published by the Hungarian Central Statistical Office (KSH), the Territorial Information System (TeIR), the National Innovation Office, the National Employment Service (NFSZ) and the United Nations. From this comprehensive dataset – focusing on the past 20 years – we identified the most significant demographic challenges of the observed area and drew up conclusions based on the findings of the analysed statistical timelines. Beside the statistical observations, we also analysed the relevant professional literature – as secondary sources – examining the origins and causes of agglomeration/urbanisation that we consider one of the most crucial problem in the demographic crises of the Hungarian rural areas. In this regard, to understand the ongoing process of the population exchange from rural areas towards urban areas, we used *Moretti's 3+1 analytical framework* to describe the most important factors fuelling the upheaval of agglomerations and the demographic decline of rural societies. Moreover, based on Moretti's 3+1 framework and also using the mentioned statistical sources, we made a descriptive analysation about the actual demographic status of Muraland from the perspective of the 3+1 factors (labour and product market, advanced intermediary services, educational externalities, spillover effects). Therefore, pointing out

at empirical facts, we can better understand and explain the sources of challenges in the demographic crisis of Muraland.

Results

If we take into consideration the statistics of the Hungarian national censuses in 2001 and 2011 and the tendencies in between, it becomes clear that the Hungarian countryside faces significant challenges in terms of demographic sustainability (KSH, 2012a, KSH, 2012b). During the period under review, there was a persistent demographic slump in all counties, including the capital as well. However, in Győr-Moson-Sopron, Komárom-Esztergom, Fejér and Csongrád counties the demographic situation was mitigated by the domestic immigration surplus due to the "Budapest suburban agglomeration" in case of Pest County, and higher employment potentials in case of others (KSH, 2012a: 5). In addition, the migration gains of Pest and Győr-Moson-Sopron counties exceeded the population loss provoked by inner outmigration, so in these two counties the population increased by 15 and 4 percent in fact (KSH, 2012b: 7). But beside these positive exceptions, the remaining territories of Hungary are duelling with a significant loss of population. The most dramatic situation was identified in Békés, Borsod-Abaúj-Zemplén, Nógrád and Tolna counties, where low birth rates, high mortality and emigration reduced the population by 8-10 percent.

Although the population in Zala decreased by less than 10 percent in the observed 10 years (KSH, 2012b: 7), the demographic reserves of small villages in the typical rural settlements of South Zala region have been largely devastated by the decades of constant population decline and drastic aging, that threatens the total depopulation of certain small settlements. This fear is verified by the census data of the Hungarian Central Statistical

Office (KSH), which shows that between 2001 and 2011 the number of births per 1,000 inhabitants attained the highest negative deviation in Zala from the 9.5 national average, where the indicator reached only 7.5‰ (KSH, 2012: 10).

At the same time, the statistics of the Territorial Information System (TeIR) also show that demographic tendencies in Muraland – mainly covered by the Nagykanizsa and Letenye districts – have been significantly lagging behind the national average over the past 10 years. According to the latest figures, in 2015 the population decline of the Nagykanizsa district was 6.23‰, and 9,99‰ in the Letenye district, while this ratio was only 4.54‰ for the West Pannon region and 4.02‰ as national average. Moreover, if we observe the domestic migration rate beside population loss, we find that in the Nagykanizsa and Letenye districts the (out)migration rate – as the rate of officially announced change of address – was -2.58‰ and -6.89‰ in 2015, while the West Pannon region, an average migration surplus of 3.28‰ was identified. As a result, the population of South Zala – depending on the actual extent of the migration outflux – is facing with a 270-550 people loss on a yearly basis, that mainly concentrates on the loss of young people.

However, the demographic situation is further exacerbated by the fact that migration is coupled with critically high aging indicators, which is clearly demonstrated that based on 100 young people (under 14 year) we can count 224 old people (beyond 60 years) in South Zala in 2015 (compared to 162 in 2005) in line with a national average of 175 people. As a result of outmigration and drastic aging, crucial population decline has emerged and the population decline in Muraland accelerates itself well beyond the national rate. This is proved by that while the population of Hungary reached 4‰ of natural loss in 2015, this indicator increased to 8‰ in Muraland.

In the light of the population trends, it can be stated that, over the years since the 2011 census, the demographic outlook of South Zala has clearly deteriorated further, with the statistics of the KSH 2016 microcensus being most marked by the statistics of KSH 2016, as well as the above-described TeIR statistics. The statistical comparison of the 2016 microcensus and the 2001 census reveals that the number of population living in rural towns during the 15 years under review has undergone a major decline, therefore the population retention potential shrunk in these cases with some particular exceptions of economically more potent cities (e. g. Érd, Győr).

As it can be seen from the statistics, in Zala County, the number of inhabitants living in county rank towns (Zalaegerszeg and Nagykanizsa) decreased by 11.1 percent between 2001 and 2016, which is situated only 3.2 percentage points behind the worst result in Nógrád County (Salgótarján). In addition, with a deeper analysis of the data provided by the Central Statistical Office, we can further detail the worsening demographic situation in South Zala. Accordingly, between 2001 and 2016 the population of the Nagykanizsa district decreased by 11.76 percent, while the proportion of population decline in Zalaegerszeg was only 6.97 percent. From this perspective, it can be noted that Zala County, specifically Muraland, faces drastic demographic challenges, which can be considered the most important rural development concern of the region. Therefore, in order to understand the complexity of the situation, it is important in our paper to observe the factors that caused the demographic crisis of South Zala.

Discussion

In order to understand the reasons behind the challenges of South Zala and to develop an appropriate strategy to increase the commitment of inhabitants towards the rural regions

(Gyulavári, 2013), it is important to examine the factors influencing demographic processes that push the rural population towards urban centers. For this aim we can rely on Enrico Moretti's 3+1 framework that describes the potentials of urban areas with the following segments (economics of agglomeration) (Moretti, 2014: 8-15):

- labour and product market: One of the most important attractions of metropolitan centers is that higher level of population is generated in their territories due to the higher population concentration enables diversified product markets and advanced services through the benefits of economies of scale. In addition, due to the high population concentration, highly skilled labour is also accrued more easily, which means that the local economy can produce higher added value. Coupled with a high standard of living, it provides a significant attraction for the resettlement of the rural population.
    - In this area, the biggest challenge for South Zala is that due to the industrial decline of the 1990s and the highly skilled labour force and the outmigration of young people, income differences in the country increased. According to KSH, in Q1 2018, the monthly net average salary in Zala was 165.856 Forint against the national average of 210.318 Forint (KSH, 2018). Consequently, the market demand and consumption of the people living there is much more limited, which is one of the most significant obstacles to the development of stronger local economy (Péter et al., 2012: 23).

      After 2010, the accelerating production – as a result of national macroeconomic stabilization – soon made it clear that in Muraland the sectoral shortage of labour created by the former "brain drain" is also a major obstacle in the growth of local businesses. According to the statistics

of the National Employment Service, in April 2018 there were 3380 vacancies registered in Zala County, which is considered to be one of the worst results in Hungary (NFSZ, 2018). Consequently, due to the limited consumption potential and the unbalanced labour market conditions, in the present circumstances, no effective labour and product market can be identified that could significantly strengthen the population retention capacities of the area.

- advanced intermediary services: Another major advantage of urbanization centers is the large-scale creation of intermediary service providers (mainly in engineering and maintenance, financial advisory, legal aid, project management or marketing) in their territories, providing subcontracting secondary functions for large enterprises. By doing so, through exploiting the positive externalities brought about by specialization and diversification, companies save on significant HR and financial capacities, resulting in a more competitive economic structure and wider employment thanks to the high degree of flexibility.
    - In this category, the biggest challenge of Muraland is the lack of corporate and research backgrounds with high innovation efficiency. As the National Intelligent Specialization Strategy – developed by the National Innovation Agency in 2014 – points out, in case of Zala County we can identify a drastically low level of innovation spending, that did not reach 2.5 billion Forint in 2012 (NIH, 2014: 46). Thus, Zala County is situated among the low knowledge and technology intensive regions, that – due to the lack of corporate growth – doesn't leave room for advanced intermediary services in the region.

- educational externalities: At the centers of urbanization there is an extensive educational infrastructure having a flagship role in the maintenance and development of knowledge capital. Educational institutions have also the function of attracting people from nearby settlements (Szőke–Kovács, 2016). As a spill-over effect of education development, more human capital can be used to serve the labour market. All this allows higher living standards and more competitive economic output through greater added value, which indirectly motivates the further development of education. Research showed significant differences between the central and convergence regions among higher education institutes (Malota, 2014, 2016).
    - The most significant backbone of education in Muraland is the University of Pannonia Nagykanizsa Campus, where higher education and research activities are carried out to enhance co-operation between development stakeholder, to supply the market needs and serve the local innovation. This commitment is demonstrated by the training program of the University of Pannonia, based on the traditionally significant expertise of water management in Muraland, in cooperation with the local government of Nagykanizsa and with the Hidrofilt Ltd. Due to this alliance, founded the Soós Ernő Water Technology Research and Development Center was founded in 2014 which has been tailored to meet actual business needs, complemented by education and training program activities. The importance of the higher education focusing on water is further strengthened by the successful accreditation of the postgraduate water and

sewage system operator program in 2016, thus strengthening the market orientation of education at the Campus.

- spillover agglomeration: the combination of the three previous factors causes a self-generating efficiency process, which makes the development of urbanization centers virtually self-made. As the research results show, the doubling of the size of cities results in a 5-8% improvement in the efficiency of their economic production (Rosenthal-Strange, 2004). Due to the agglomeration effect, urbanization centers are able to create more competitive socio-economic structures, therefore the disintegration of rural areas with competitive disadvantages becomes permanent without any meaningful counteraction.

Apart from the economic, educational and market factors that have led to a profound transformation of the rural demographic structure, of course, there are a number of alternative background factors that can reinforce the process of urbanization (e.g. efficient local governments, user-friendly public services, more powerful self-reliance, stronger political relations, networks) (Christiansen-Loftsgarden, 2011: 8). At the same time, without the 3 + 1 basic factor, no other urbanization factor can reach significant effects, thus it is necessary to the focus on these underlying factors when analysing the triggers of urbanisation. It therefore becomes possible to interpret the impact of urbanization pulling forces in the demographic crisis of the countryside to ensure adequately planned and implemented policy responses from the rural development side.

After the examination of the demographic and rural development challenges in the Mura region, we believe that the reform-oriented treatment of the mentioned segments from Moretti's 3+1 model is the key element to ensure the long-term catch-up of Muraland in terms of demographic trends and economic competitiveness. In this engagement, our

geographic embeddedness provides us a meaningful advantage in the Mura Region where significant rural development best practices can be identified in Styria, Slovenia (Prekmurje and Pomurje) and in Croatia (Međimurje) that could be also implemented in Muraland through joint initiatives. In this regard, by relying on cross-border development cooperations and rural policy expertise, we can realize significant achievements in the rural development policy of Muraland. Accordingly, the internalization of regional experiences and good practices from the wider Mura region (from Styria to Međimurje) plays a strategic role in restoring the social and economic competitiveness of South Zala.

However, how to adapt the identified examples to local conditions raises a number of additional questions that may be subjects of new research papers in the near future in order to ensure that the empirical knowledge can be converted to the social and economic capital of the region. As a result, an emerging academic and policy dialogue can give further impetus to the rural development efforts of South Zala, so that we can find adequate solutions for our challenges through the experiences of our neighbours.

References

Christiansen, Petter – Loftsgarden, Tanja (2011): Drivers behind urban sprawl in Europe, Institute of Transport Economics, Norwegian Centre for Transport Research, Oslo

Csordás T. – Gáti M. (2013): A kommunikációs eszközök együttélése és kapcsolódásaik: az integráció dilemmája [Symbiosis and connections of communication tools: the dilemma of integration]. In: Horváth, Dóra – Bauer, András (ed.): Marketingkommunikáció - Stratégia, új média, részvétel kérdései [Marketing communications: Issues of strategy, new media, and participation. Akadémiai Kiadó, Budapest, Chapter 2.2. 74-83.]

Dobbs R., Smit S., Remes J., Manyika J., Roxburgh C., Restrepo A. (2011): Urban World: Mapping the Economic Power of Cities, McKinsey Global Institute, Report

Foley, Rider W. – Petrucci, Darren – Wiek, Arnim (2014): Imagining the Future City, Issues in Science and Technology, Vol. 31, No. 1, 2014

Gyulavári T. (2013): A lojalitásprogramok menedzselése. Vezetéstudomány, XLIV évf., 5. szám, 16-26.

Központi Statisztikai Hivatal (2012a): A belföldi vándorlás főbb folyamatai, 1990-2011, *Statisztikai Tükör*, **6**. 85.

Központi Statisztikai Hivatal (2012b): Magyarország Társadalmi Atlasza, (letöltés ideje: 2018.08.08.)

Központi Statisztikai Hivatal (2018): Havi nettó átlagkereset – 2018. I. negyedév, http://www.ksh.hu/docs/hun/xftp/megy/181/index.html (letöltés ideje: 2018.07.04.)

Malota E. (2014): A hazánkban tanuló külföldi cserehallgatók véleménye Magyarországról és magyarországi tanulmányaikról, in Dobos Gábor: felsőoktatási mobilitást akadályozó és ösztönző tényezők Magyarországon. Tempus Közalapítvány, Budapest

Malota E. (2015): Erasmus szerelem - oktatásturizmus a nemzetköziesedés tükrében in Marketing nemzetközi színtéren: Esettanulmányok a hazai és külföldi piacokról, Budapest, Alinea Kiadó

Malota E. (2016): Student Satisfaction Survey, 2016, Hungary and Hungarian Higher Education according to International Students, Tempus Közalapítvány, Budapest

Meikle, Jeffrey L. (2014): The Future City, In.: Rethinking the American City: An International Dialogue

Moir, Emily – Moonen, Tim – Clark, Greg (2014): The future of cities: what is the global agenda? The Business of Cities

Moretti, Enrico (2014): Cities and Growth, Evidence Paper, International Growth Centre, London

Nemzeti Innovációs Hivatal (NIH) (2014): Nemzeti Intelligens Szakosodási Stratégia

NFSZ (2018): Az NFSZ adatainak összefoglaló táblázata (2018. április), https://nfsz.munka.hu/Lapok/full_afsz_kozos_statisztika/full_afsz_az_afsz_nyilvantartasok_fontosabb_adatai/content/nfsz_havi_reszletes_adatok_2018_4.pdf (letöltés ideje: 2018.07.04.)

Péter E. – Keller K. – Kaszás N. (2012): Kutatási jelentés a „Searching for New Business Opportunities in the Cross-Border Region" című projekthez, Pannon Egyetem Nagykanizsai Kampusz

Rosenthal, Stuart S. – Strange, William C. (2004): Evidence on the Nature and Sources of Agglomeration Economics, Handbook of Regional and Urban Economics, 4, 49.

Szőke V. – Kovács L. (2016): Klassische Modelle der Raumstruktur und der räumlichen Beziehungen am Beispiel des Bildungswesens im westungarischen Komitat Vas. A NYME Savaria Egyetemi Központ Tudományos Közleményei 21.; Természettudományok 16. 81-89.

United Nations, Department of Economic and Social Affairs, Population Division (2015): Population 2030: Demographic challenges and opportunities for sustainable development planning

United Nations, Department of Economic and Social Affairs, Population Division (2014): World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352)