## INFRASTRUKTURA I EKOLOGIA TERENÓW WIEJSKICH INFRASTRUCTURE AND ECOLOGY OF RURAL AREAS

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# CHANGES IN THE POPULATION POTENTIAL IN RURAL AREAS OF THE ŚWIĘTOKRZYSKIE VOIVODESHIP¹

### **Summary**

The aim of this study was to present basic trends in population processes in rural areas of the Świętokrzyskie Voivodeship. With the period of 2003-2008 the main subject focused on changes in population size, elements responsible for the character of population changes with components of natural and migratory movement. Changes in the labour market against changes in the number of people employed and unemployment were also discussed. The analysis proved considerable spatial diversification of the processes in question.

Positive population-related phenomena were recorded in municipalities located in a suburban zone, whereas negative phenomena occurred in the outskirts of the area and locations of economic restructuring.

**Key words:** population changes, population growth, migrations, unemployment

### INTRODUCTION

Quantitative and qualitative population potential is an integral element of economic growth in particular areas of the region. The current demographic processes in rural areas are highly polarized and this trend will continue due to favourable development processes in suburban municipalities and those located in the vicinity of the main transport routes as well as unfavourable processes in the peripheral areas and those with monofunctional structure. According to

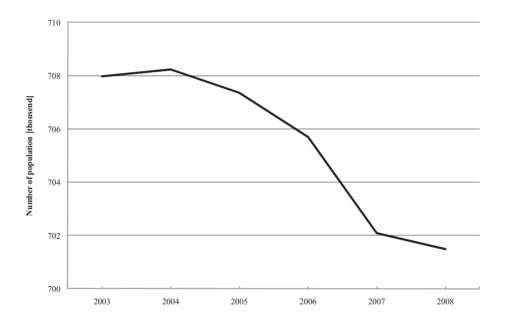
<sup>&</sup>lt;sup>1</sup> The territory of the Republic of Poland is divided into *województwa* – voivodeships (sometimes referred to in English as 'provinces') which are composed of *powiaty* – poviats (sometimes referred to in English as 'counties'). The smallest administrative units are *gminy* – municipalities (sometimes referred to in English as 'communes').

Rosner (2010), in a relatively short period, from the 1950s on, the size of population of rural areas did not change much. In late 1950s it amounted to 14.8 million inhabitants, the same as in 2007, half century later. Since the early 1990s populations of rural areas located in the vicinity of urban centres have been growing. This phenomenon is connected with two migratory factors: the first of economic background, connected with the inflow of population coming from distant peripheral rural areas, the second – migration of urban population from towns and cities and development of bedroom suburbs. However, there are also depopulated areas with a decrease in the population size since the early 1950s. On a regional level two trends may be presently recognized: depopulation and population concentration. Some different demographic trends are visible in voivodeships ('former' and present) in the opposition: centre of the system – peripheral areas (it may also be observed in local systems: municipality centre – its peripheral areas). On the country level location in the vicinity of large urban centres (cities) is a typical feature of concentration of demographically active zones, on the regional level – they surround larger towns. In the period of transformation rural areas show various degree of adaptation to the market economy and new socio-political conditions. Diversified development potential and the degree of spatial use considerably affect the nature of demographic and spatial and functional structures of the rural areas.

The aim of this study was to present basic trends in population processes in rural areas of the Świetokrzyskie Voivodeship in the period of 2003-2008. With its area of 11.7 thousand km<sup>2</sup> (3.7% of the territory of Poland) the Świętokrzyskie Voivodeship is one of the smallest in Poland. It is further divided into 102 municipalities, 13 land poviats and one city – Kielce – as a separate poviat (urban poviat). The Poviat of Kielce with the largest area (2.2 thousand km<sup>2</sup>) and population (199.8 thousand inhabitants) is at the top of the region. The smallest in size is the Poviat of Skarżysko (395 km<sup>2</sup>) and in the number of inhabitants is the Poviat of Kazimierza Wielka (35.5 thousand people). On 30th June 2008 the population of the voivodeship amounted to 1,270,600 with 577,600 people (45.4%) in urban areas and 693,000 (54.6%) in rural areas. The Świętokrzyskie Voivodeship together with the Lubelskie and Podkarpackie Voivodeships are the least urbanized in Poland. Currently it includes 31 towns – 25 small, 5 middle-sized and one city (Kielce). The voivodeship's size structure of urban locations was formed by the history of Poland. Moreover, considerable share of agriculture in the economic structure and natural environmental conditions of the voivodeship did not foster the emergence of urban locations: middle-sized towns and larger cities. The region in question has a diversified social and economic character. In the northern and central parts industrial function prevails, whereas the south is dominated by agriculture. Economic potential is connected with mining and processing industry (rock materials). Another important feature is the central location in Poland in the vicinity of large urban centres: Warsaw, Kraków, Łódź. Problems of the voivodeship result from transformations of the labour market, which lead to high unemployment as well as underinvestment. On 31st December 2008 the unemployed amounted to 77.7 thousand with 54.9% women and 56.3% from rural areas.

### RESULTS OF THE STUDY

In the period of 2003-2008 there was a continuous fall in the population size. Within this period the number of inhabitants of rural areas decreased from 707.9 thousand to 701.5 thousand people (Fig. 1).



**Figure 1.** Changes in population density in rural areas of the Świętokrzyskie Voivodeship in the period of 2003-2008

The largest drop in the population size was recorded in the southern and north-western parts of the region. Its eastern and central parts are more stable. Almost half of the region's territory is classified as a depopulated area. Inability to sell farm produce, insufficient infrastructure to connect villages with 'the world', poor communications with a distant labour market, progressing growth of pension age population, in rural areas in particular, make the problems even harder to solve [Kiniorska, Wrońska, 2004].

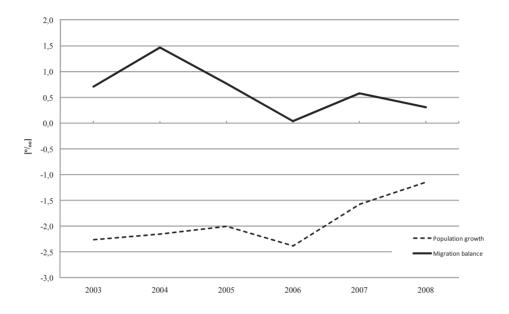
Increased employment was recorded in the areas surrounding the voivodeship capital (e.g. Morawica, Miedziana Góra) and subregional centres such as Jędrzejów, Busko Zdrój. It is due to concentration of service function in these centres which they provide for the surrounding rural areas.

Dynamics of population changes is affected by two elements: population growth and migration balance. Analysing their influence it should be noted that the significance of migration balance has recently increased. Before 1990s the characteristic feature of the Świętokrzyskie Voivodeship was high mobility of its integral migrations. In 1988 some 68% of all migrants moved from rural areas to urban locations. In the next consecutive years there was a reverse trend in migrations from towns to rural areas (75% growth in total). In 2007 the overall migration balance was 2.3%. Urban areas lost 3.3 thousand people (5.7%) whereas rural areas gained 0.4 thousand (0.6%). It was connected with rising unemployment rate. Lost opportunities for work and life in a town made the population with dual occupation (including farmers) come back to the countryside. In the 1990s the outflow of rural areas population outnumbered the urban population outflow. This phenomenon relates to searching additional employment, by dual occupation population in particular. After 2000 there was a slower population outflow in general as compared to previous years. The largest group of the people leaving the voivodeship was composed of city dwellers. In recent years there has been an increase in internal migration from urban centres, suburban zones and – to a lesser extent – from rural areas. This common phenomenon in the world is called *counterurbanization* and means the migration of inhabitants of highly urbanized areas to poorly populated location, e.g. villages.

In the period of the study migration balance was positive with negative population growth. However, the analysis of migration balance showed its rising trend (changes from -2.3% to -1.1%) – (Fig. 2).

For the whole period of the study the largest population decline was in the municipalities of Bejsce, Radkowice, Tarłów i Opatowiec. The highest values exceeding 5% a year were reported from such municipalities as Górno, Sit-kówka Nowiny, Bieliny, Chęciny and Piekoszów (suburban municipalities). In the period of 2003-2008 the intensity of the inflow started to weaken which led to decreased migration balance – it dropped from 0.7% to 0.3%. The lowest values were noted in the municipalities of Gowarczów, Ruda Maleniecka, Skarżysko Kościelne, Wąchock, Oleśnica and Lipnik whereas the highest – in the municipalities of Miedziana Góra and Morawica. Spatial diversity of demographic processes in Poland still affects population size in both rural and urban areas. The analysis of natural movement and migration balance showed that the importance of rural areas located in the vicinity of major urban centres had considerably increased. Thus, these higher demographic parameters affect population density. Depopulation phenomena were observed in peripheral areas or those with unfavourable functional structure, so-called rural problematic areas,

which require agricultural restructuring as well as multifunctional development. Diversification of demographic potential is correlated with economy-related processes.



**Figure 2.** Population growth and migration balance in rural areas of the Świętokrzyskie Voivodeship in the period of 2003-2008

Another group of negative trends is visible in the population structure according to economic age groups. A continuous drop is reported for pre-working age population, from 30% in 1988 to 19% in 2007, with an increase in working age population – from 56% to 63% and pension age group from 14% to 17%. Due to 'migrations' of baby booms and periods of population decline in various age groups the period of 1988-2007 brought an increase in the percentage of working and pension age population. Continuous decline in population growth in combination with rising life expectancy contributed to an increase in the size of pension age population (Wrońska 2005). Women constitute the majority of the region's population (51.3%) and the general feminization rate is 105 while in urban areas it is 110 and in rural areas 101. The highest number of women per 100 men amounted 108 and was noted in the subregion of Ostrów-Starachowice-Skarżysko, whereas the lowest – 102 – in the subregion of Jędrzejów and Pińczów. The percentage of working age population has recently increased. Within this group the percentage of work-mobile group has been

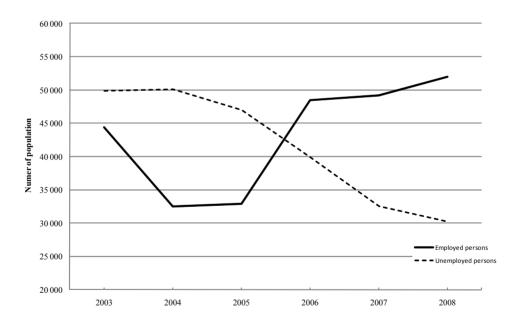
falling with increasing immobile population. Therefore there is an increase in the number of people at working age with simultaneous drop in economic 'burden'. For each 100 people at working age there are 58 persons at the nonworking age (pre-working and pension age). This ratio looks as follows: towns – 51 persons, rural areas – 65. Greater number of pension age people proves aging of the population, particularly in rural areas.

Restructuring processes in the Polish economy require constant and multidirectional development of employees skills and qualifications, both general and professional. However, there are still differences in education level and methods connected with the structure of sex and age of the population and its place of living. Since the beginning of the economic transformations the region and the whole country have increased the level of education of city dwellers and rural area population. In the spatial distribution of municipalities the range of variable included the municipalities of Staporków (15,3%) and Solec Zdrój (3.4%). Requirements of the labour market considerably contributed to higher quality of education of the population. It was also supported by a natural decline in the number of the oldest and worst educated people within the group. However, this educational and skill potential is hardly or partially used due to the fact that rural areas offer much smaller opportunities to use it in practice. In the group of individual farmers of the voivodeship there was an increase in the number of people with higher, secondary, post-secondary and basic vocational education; simultaneously, the percentage of people with no primary school education declined. This is general trend both for the regional and the whole country. According to PSR 2002, 36% of all individual farmers had some agricultural educational background. The largest percentage - 63.9% (56.2% in rural areas) – was composed of people without agricultural degree and 25.3% (23.7% in rural areas) attended agricultural courses. In the group of the smallest farms in size there were more people without agricultural education and courses. The owner of larger farms are far better agriculturally educated. In the period of 2002-2007 the structure of agricultural education did not face any considerable changes. People with dual occupation are generally better educated in comparison with those with one occupation in their farms. In the period in question this population faced positive changes in all educational categories which successfully reduces the number of the unemployed on the contemporary labour market and provides better opportunities. Place of living still diversifies the population structure according to its education claims that possibilities of further reduction of education gap between urban and rural population depend on the existence of equal chances for rural area inhabitants to continue their education as it is in towns and cities.

Transformations of the labour market are driven by multiple factors which depend, to some extent, on the distance from towns and traffic routes. It means that the location in the vicinity to regional and subregional centres (and in mu-

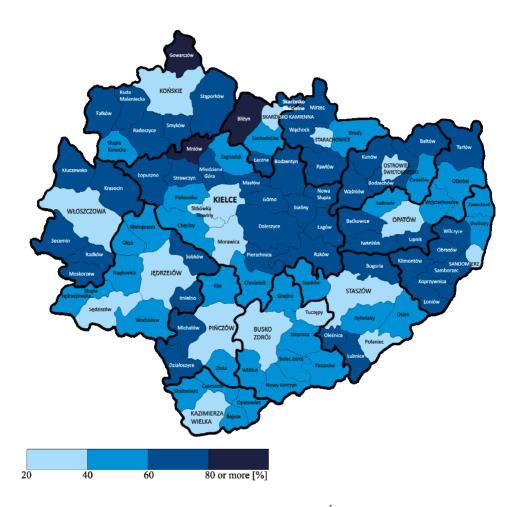
nicipalities – local centres) facilitated changes in structures and functions of rural areas whereas peripheral location – stagnation or even economic decline. Long-lasting unemployment badly affected municipalities located on the outskirts of the Poviat of Kielce (northern and eastern parts), Poviat of Sandomierz (western), Poviat of Opatów (southern), Poviat of Końskie (southern) and Poviat of Włoszczowa

In the analysed period of some positive socio-economic phenomena occurred, visible in increased economic activity of the population of rural areas and formation of labour market elements. In the period of 2003-2008 the number of people employed went up to 51,979 from 44,418, and the number of the unemployed fell from 49,867 to 30,206 (Fig. 3). Workforce potential as the number of the employed is one of elements which determine development of urban and rural centres [Kiniorska, Brambert, 2009]. High percentage of the employed was recorded in urban-rural municipalities, where a dominant urban centre defines functional structure of the area and influences the employment rate.



**Figure 3.** Elements of the labour market in rural areas of the Świętokrzyskie Voivodeship in the period of 2003-2008

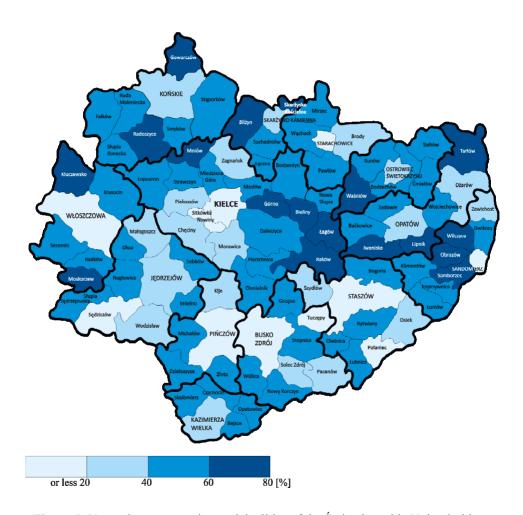
Following analyses of unemployment distribution in particular municipalities some trends may be emphasized. The analysis of 2003 showed there were four groups with different levels of the registered unemployment (Fig. 4).



**Figure 4.** Unemployment rate in municipalities of the Świętokrzyskie Voivodeship at the end of 2003. Source: Own study based on data of the Regional Data Bank – BDR (the Polish Central Statistical Office – GUS), [Kiniorska I., Brambert P., 2009]

The first group consisted of 18 units (mainly urban and urban-rural municipalities which functioned as subregional centres of their areas), while the second had 33 municipalities. The largest, with 48 municipalities and unemployment rate between 60-80%, was the third group. The fourth one included 3 municipalities.

palities – Gowarczów, Bliżyn, Mniów – with the highest unemployment rate that exceeded 80%. In 2007 a decline in unemployment rate was observed in numerous locations of the voivodeship. In the group of areas with unemployment rate of 60-80% there was a shift of 13 municipalities to the group with unemployment rate below 40% (Fig. 5). The highest rates of long-lasting unemployment were reported for areas located on the outskirts of the Poviat of Kielce (northern and eastern parts), Poviat of Sandomierz (western part), Poviat of Opatów (southern), Poviat of Końskie (southern) and the Poviat of Włoszczowa.



**Figure 5.** Unemployment rate in municipalities of the Świętokrzyskie Voivodeship at the end of 2007. Source: Own study based on data of the Regional Data Bank – BDR (the Polish Central Statistical Office – GUS), [Kiniorska I., Brambert P., 2009]

As far as registered unemployment is concerned the areas located in the vicinity of urban centres were and still are in much better conditions. There are more job opportunities in suburban zones than in municipalities situated far from towns and larger markets. Higher rates of unemployment occur in industrial areas, in subregions of Ostrów-Starachowice-Skarżysko, Końskie-Włoszczowa (over 23%) and Kielce (20.4%), where their recovery from postrestructuring shock of the 1990s is difficult. In agricultural subregions of Jedrzejów-Pińczów and Kazimierza Wielka the unemployment rates are much smaller – almost half the size of those in other areas. Rosner (2001) claims that the south-eastern regions of Poland, including former Galicia, belong to areas with the highest rates of hidden unemployment. The labour market undergoes constant changes. When the transformations began newly established conditions for economic growth contributed to increased unemployment. Analysing unemployment and employment data some cyclical trends may be recognized. Municipalities of the region had relatively high unemployment rates in comparison to trends for the whole country. Higher values of unfavourable phenomena on the labour market dominated in areas with considerable functional changes (industrial restructuring, liquidation of companies or employment reduction). Another problem to solve was relatively low vocational mobility of the population of rural areas, which strengthened unemployment not only in these areas. The rate of unemployment in rural areas was influenced by minor chances for nonagricultural employment and more expensive, difficult and time-consuming access to *poviat* employment agencies and their branches.

Relatively low unemployment rates were measured in municipalities located in the vicinity of the voivodeship's capital, mainly in the southern and south-western parts (Piekoszów, Chęciny, Sitkówka-Nowiny, Morawica). Much higher unemployment rate was in the northern part in the areas of structural unemployment from economic transformations introduced in the last decade of the twentieth century.

### **CONCLUSION**

After the Second World War rural areas supplied population potential to fast developing urban town, cities and industrial centres. This phenomenon was conditioned by dynamic migration which led to increased disproportion in the population distribution and its structure. In the previous two decades this trend changed due to weakening migration from towns to villages as well as falling fertility. The economic crisis of the 1980s led to a year-on-year decrease in population migration from urban to rural areas, and in 1982 caused an increased population inflow to rural areas [Długosz, Soja, 1991]. The crisis with an industrial slump, construction industry slowdown, imbalanced food market and higher environmental pollution made town unattractive to migrants. Dynamics

of demographic processes in rural areas after the Second World War was influenced by promoted industrialization and rising differences in standards of living in rural areas and urban locations. The results presented in this paper have not exhausted the subject of the analysis but they underline some trends in demographic processes which also affect changes in the labour market. Population phenomena in rural areas are not only influenced by their functions but also their location in the vicinity of urban areas of subregional nature.

Presumably the fastest socio-economic growth will be recorded in rural areas surrounding large urban locations (following growth centres theory). They will simultaneously become highly urbanized which means further decrease in agricultural activities with growing activities in the service sector [Nowak, Kiniorska, Brambert, 2009].

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