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Eastern Poland: a belt of poor regions

Eastern Poland, metaphorically referred to as “The Eastern Wall”, consists of five voivodeships, which correspond to NUTS 2 units. The voivodeships include Lublin (LU), Subcarpathia (SUB), Podlasie (PD), Świętokrzyska Land (ŚL), and Warmia-Mazuria (WM) (Figure 1).

The regions of Eastern Poland are among the poorest in the European Union (and Poland). In 2006, per capita GDP (by purchasing power parity) in the five least developed voivodeships represented barely 40% of the average GDP in the EU. They form a compact belt occupying 32% of Poland’s area and inhabited by 22% of the country’s population. In total, they account for approximately 16% of Poland’s GDP, while they should contribute approximately 32%.

The situation in Eastern Poland as we know it today results from external as well as internal factors, the most significant among the external factors being the region’s history. The implications go back to the time when Poland was partitioned in the 18th century among Russia, Prussia and Austria. The concurrence

Figure 1. The voivodeships of eastern Poland.



Source: own compilation.

of various historical and political circumstances has led to lasting domestic inter-regional and intra-regional disparities.

Development problems of Eastern Poland

As a dynamically growing EU country, Poland has administered a regional policy aimed at alleviating regional disparities by boosting economic, social and territorial cohesion. The policy focuses on the entire Eastern Poland and each of its voivodeships with the principles of sustainable development in mind. However, this necessitates overcoming a number of problems which have accumulated over centuries. The gravest problems are presented below:

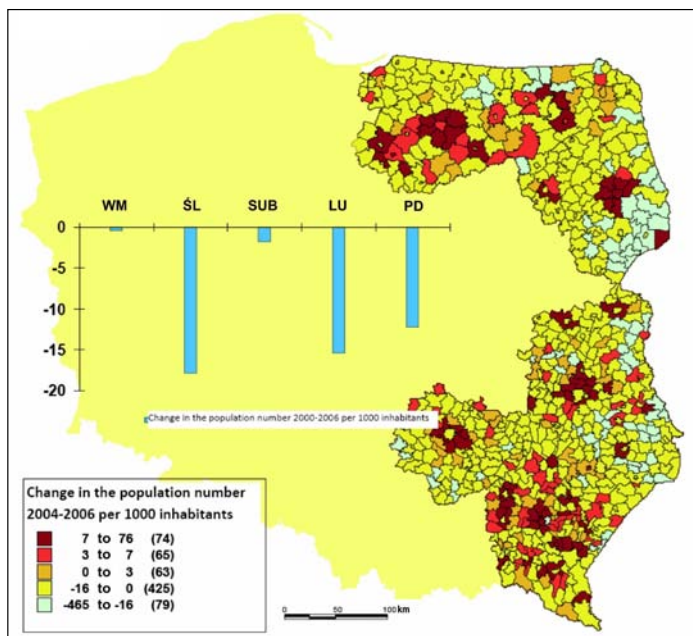
(1) Social problems

(a) Negative effects of demographic processes

The population of Eastern Poland is shrinking. Between 2000 and 2009, it declined by 102,518. The mean annual rate of population growth is negative here and amounts to -0.07 (national average +0.05).

As Figure 2 clearly indicates, in this respect the most unfavourable situation is in Podlasie, Lublin and Świętokrzyska Land. In these voivodeships, population

Figure 2. Demographic processes.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

growth occurs only in the territorial units (communes) surrounding the regions' biggest towns.

Over 2006-2020 the population of Eastern Poland was expected to shrink by 200,000, with the steepest decline affecting Lublin voivodeship (approximately 80,000) and Świętokrzyska Land (approximately 60,000). A similar decline was expected in Podlasie.

(b) Population ageing and migration

In 2009, the birth rate in Eastern Poland amounted to 5,286. It differed significantly among the voivodeships. Warmia-Mazuria and Subcarpathia enjoyed birth rates of over 3,000 while Świętokrzyska Land, Podlasie and Lublin had -1,056; 37 and -739, respectively. The birth rates also differed between rural and urban areas.

Another important characteristic of Eastern Poland is the advancing ageing of the society. This means that the number of people aged under 18 is decreasing while those at post-working age is growing (Figure 3). This development affects chiefly Podlasie, Lublin and Świętokrzyska Land.

The decrease in the working-age population in Eastern Poland also results from migration; the intensity of this process varies from one voivodeship to another. It tends to be the highest in Warmia-Mazuria and Lublin voivodeships, where the 2006 net out-migration per 1,000 population exceeded -3.5 and -3.2, respectively, as against -0.9 in Poland and -2.6 in the whole of the eastern belt. The destinations of migrations abroad varied: the US, Italy and Germany in Lublin voivodeship; the US, Belgium and Germany in Podlasie, and the US and Germany in Warmia-Mazuria.

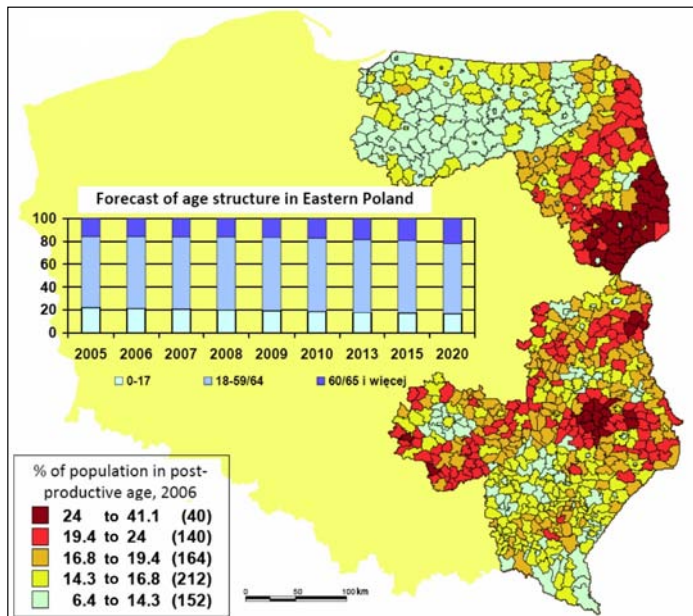
(c) Population concentration

In all the voivodeships of Eastern Poland, population density is lower than in the rest of the country (123 persons per km²). The least populated voivodeships include Lublin (86 persons per km²), Podlasie (59 persons per km²) and Warmia-Mazuria (59 persons per km²). The differences in population density are even more acute when the rural areas are analysed. The average population density in rural areas in Poland amounts to 50 persons per km², while in Podlasie it is 25 persons per km² and in Warmia-Mazuria 24 persons per km².

It so happens that the regions with the lowest population density have relatively high urbanisation indicators. In Poland, the urbanisation indicator amounts to 61% while in Warmia-Mazuria to 60% and in Podlasie to 60% (Figure 4). On the other hand, Lublin, Świętokrzyska Land and Subcarpathia have urbanisation indicators of 46.5%, 45% and 41%, respectively.

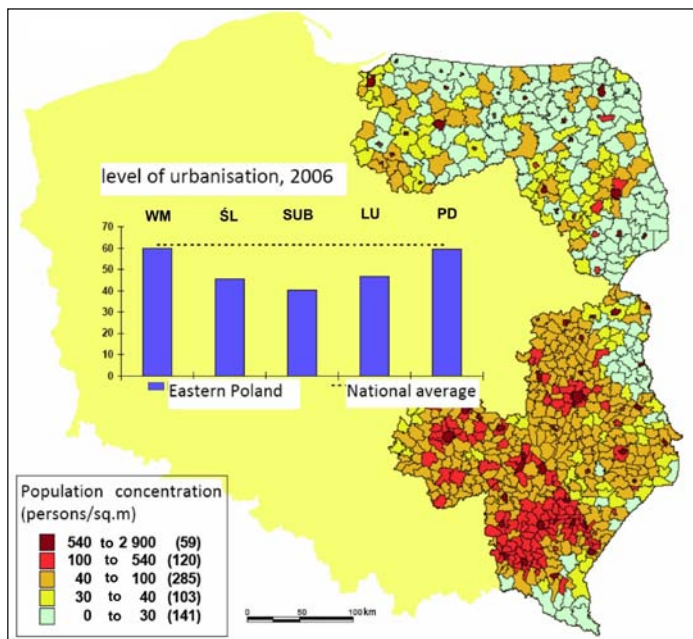
Another feature of Eastern Poland is that only three cities have populations exceeding 200,000 (Lublin, Białystok and Kielce). This indicates that Eastern Poland lacks metropolises; it is common knowledge that contemporary metropolises drive economic and social growth. They also generate spill-over and other similar processes.

Figure 3. Ageing society.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

Figure 4. Population concentration.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

(d) *Differences in labour skills and in the quality of life*

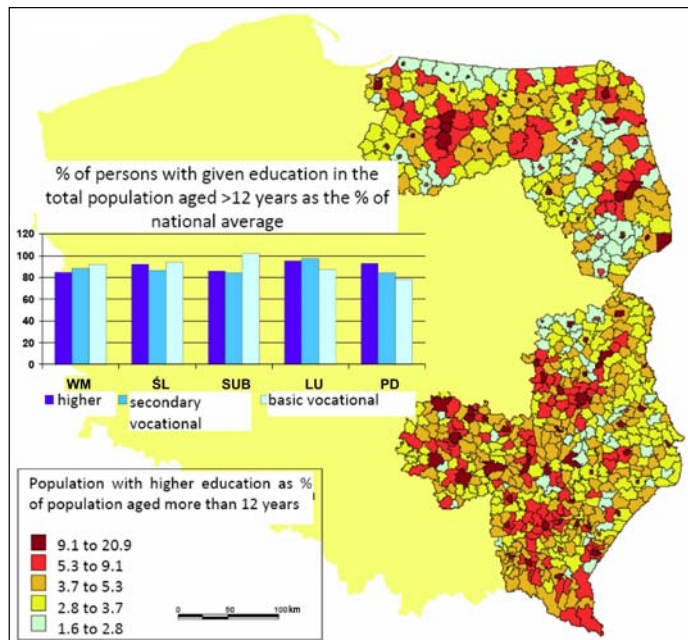
The level of education in Eastern Poland is slightly below the national average. For example, 18.7% of Poland's population has tertiary education as against 17.1% in Eastern Poland. In Poland, 33.7% of people have secondary education, while the figure for Eastern Poland is 33.2%.

From the point of view of the labour market, the population's level and scope of vocational education is crucial. 46.5% of the population in Eastern Poland has vocational education (secondary and post-primary), while the national average amounts to 47.7%. The above data are 2010 estimates (Aktywność ekonomiczna ludności Polski. IV kwartał 2010).

The level of education tends to vary from one region of Eastern Poland to another; it differs in each of the voivodeships. For example, the biggest number of people with tertiary education can be found in Lublin, Podlasie and Świętokrzyska Land, voivodeships with dynamic academic centres. On the other hand, the smallest number of people with tertiary education is in Warmia-Mazuria and Subcarpathia, even though they also host higher education institutions (HEI) (Figure 5).

Sociological research indicates (see Czapiński 2007) that among the 16 Polish voivodeships, Warmia-Mazuria and Świętokrzyska Land offer the worst living conditions (ranked 15th and 16th, respectively). Average living conditions are enjoyed in Lublin and Subcarpathia (8th and 10th, respectively), while Podlasie was

Figure 5. Qualifications of the labour force.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

ranked the highest (6th) among the discussed regions. When compared with the rest of the country, the population of Eastern Poland has better access to cultural than material goods, with the latter largely affecting the quality of life, at least at the present stage of social development.

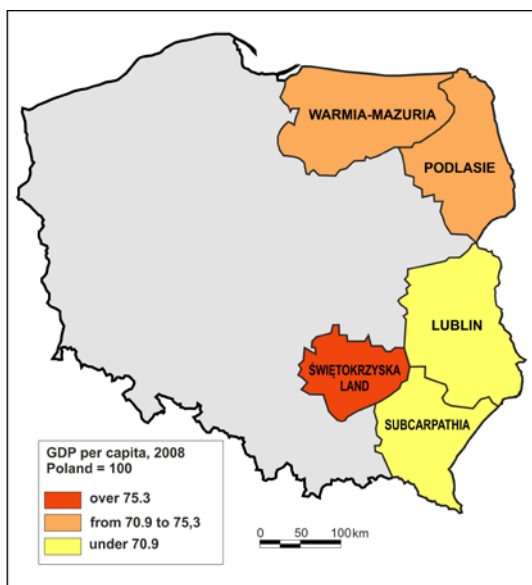
(2) Economic problems

(a) Weakness of the economy

The power of a country's or region's economy is most frequently measured by its per capita GDP. In terms of this index, the voivodeships of Eastern Poland are ranked the lowest among Polish regions. Neither of the voivodeships exceeds the national average (Figure 6), the economy of Lublin voivodeship being the weakest.

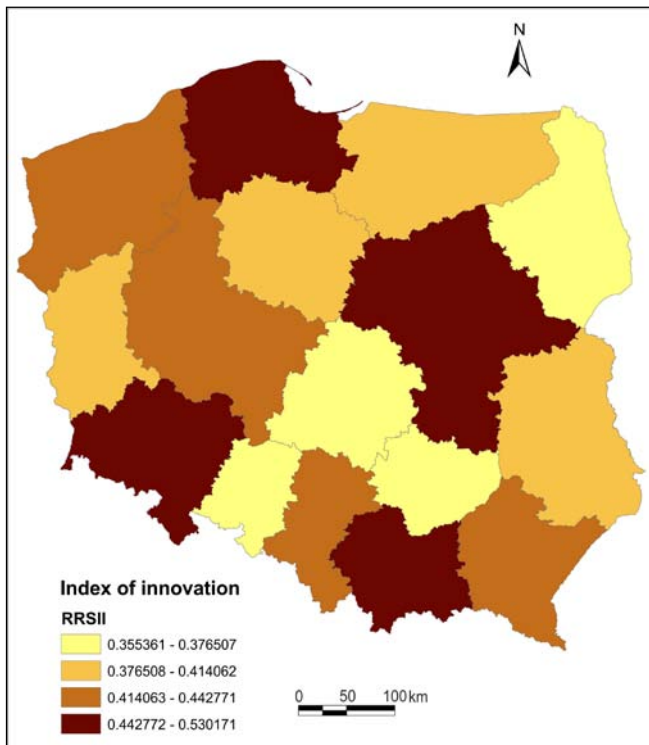
Another proof of the weakness of the economy of Eastern Poland is its low productivity. For example, in terms of per capita value of industrial production sold, the voivodeships of Eastern Poland rank the lowest in the country. On top of that, the economy of Eastern Poland as measured according to the University of Maastricht methodology (see the European Innovation Scoreboard 2010), is among the least innovative in the country (except for Subcarpathia). Two voivodeships: Świętokrzyska Land and Podlasie, are among the least innovative regions in Poland (Figure 7). This indicates that boosting the power of the economy of Eastern Poland is going to be a difficult task.

Figure 6. GDP per capita, 2008.



Source: own compilation.

Figure 7. Revealed Regional Summary Innovation Index (RRSII) of innovativeness in Polish voivodeships in 2009.



Source: own compilation.

(b) Low entrepreneurship

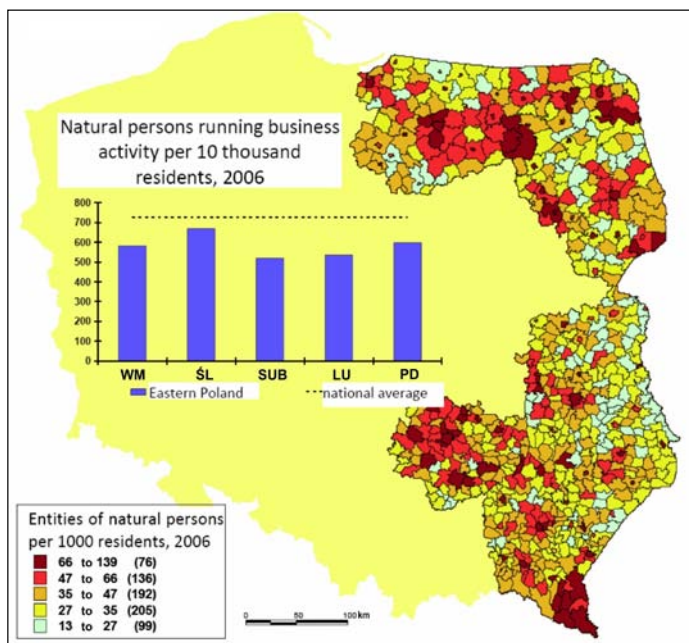
The economic power of regions and countries depends, among other things, on the business activity of their inhabitants. Hence entrepreneurship is an important factor affecting the robustness of economies of various regions. It is reflected in the form of small and medium-sized enterprises (SMEs) established and operating in a given area.

In terms of the number of economically active people per 1,000 inhabitants, the East of Poland has nothing to boast of (Figure 8). In 2006, neither voivodeship reached the national average in this respect.

The same holds true for the number of active SMEs per 1,000 inhabitants. While in 2007 the index for Poland amounted to 47, in its eastern voivodeships the respective figures were 36 in Lublin, 33 in Subcarpathia, 38 in Podlasie, 36 in Świętokrzyska Land, and 40 in Warmia-Mazuria. They all came the lowest on the ranking list (Andrzejczyk 2010).

The 2007 revenues (in million zlotys) of active SMEs per working person in the voivodeships of Eastern Poland were also below the national average of 0.322. The individual voivodeships achieved the following indicators: Lublin, 0.274; Sub-

Figure 8. Entrepreneurship.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

carpathia, 0.236; Podlasie, 0.298; Świętokrzyska Land, 0.279; and Warmia-Mazuria, 0.221 (the lowest in Poland; see Andrzejczyk, 2010).

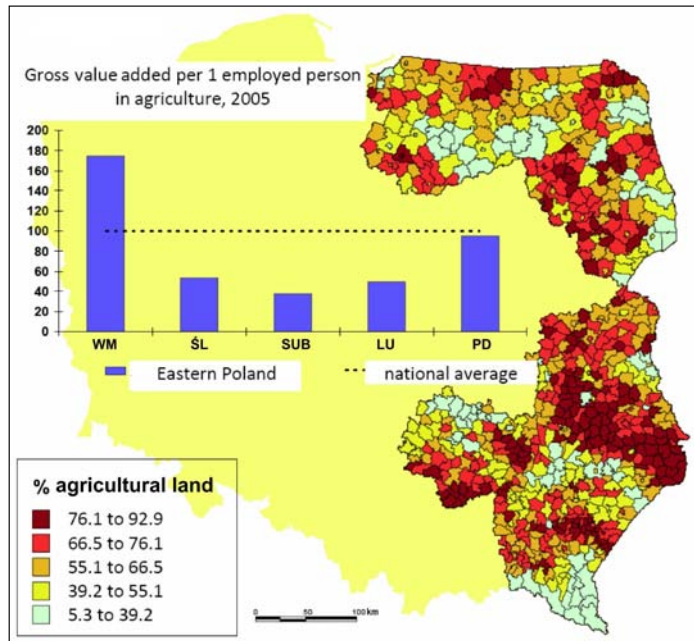
(c) Differences in agricultural potential

Eastern Poland is a collection of regions primarily agricultural in nature, with farming dominating the local economies (with an exception of Subcarpathia). However, as a result of the wrong agrarian structure, the gross value added per person employed in agriculture differs widely. For example, in 2005 Warmia-Mazuria's rate amounted to approximately 175% of the national average (Figure 9), in Podlasie it was close to the average (100%), while in Subcarpathia it was a mere 37.7% of the average (the lowest in Poland).

(d) Modernisation needs of industry

The change of the socio-economic system in Poland which occurred in 1990 brought about a transformation in all areas of the national economy. At present, the Polish economy is dominated by SMEs; as confirmed by the number of operating companies, the number of people employed, and the contribution to the GDP. Even though agriculture (and the related SMEs) is the chief force behind the economy of Eastern Poland, there is an obvious need to modernise the industry operating in that region (Figure 10). The need is confirmed by the fact that the

Figure 9. Agricultural potential.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

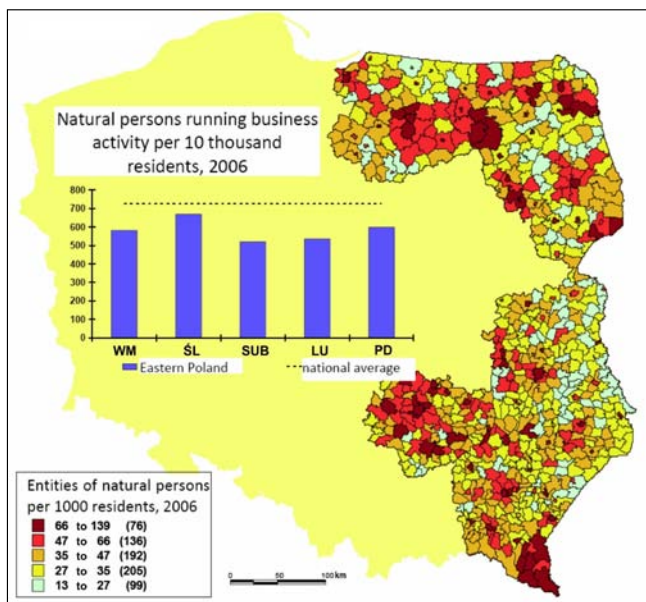
East Polish voivodeships still attain a low level of gross value added in industrial processing per employee.

(3) Problems with institutions and non-market services

Non-market services play a key role in Eastern Poland. In its economic structure they rank second to agriculture in four voivodeships, and second to industry in Subcarpathia. The productivity of non-market services is close to the national average in Warmia-Mazuria and Podlasie, and about 95% of this figure in the remaining voivodeships. Their productivity and effectiveness would be even higher:

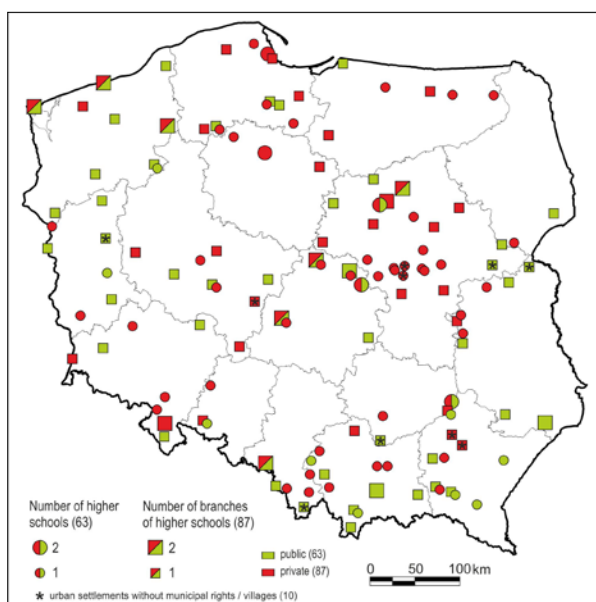
- if the participation of HEIs located in Eastern Poland in the scientific programmes offered by the EU was much greater; also, if spatial accessibility to HEIs improved (see Figure 11 for their distribution in small towns);
- if R&D employment increased significantly: R&D employment per 1,000 economically active population is substantially lower in Eastern Poland than in the rest of the country; similarly, per capita expenditure on R&D is considerably lower here than the national average;
- if there was a system of innovation support and transfer of innovative technologies connected with the national system, collecting information and making it available to any entity ready to introduce innovation to its products and processes;

Figure 10. Industrial potential.



Source: strategy for the Socio-Economic Development of Eastern Poland until 2020 (2008).

Figure 11. State-sponsored and non-state higher schools in towns and municipalities with a population of under 50,000 in Poland, 2009.



Source: own compilation.

- if there was a network of lifelong learning centres sensitive to actual employment needs of industry and e-commerce; and
- if there was a development management system based on efficient public-sector institutions.

(4) Problems of the territorial cohesion of Eastern Poland

A well-developed infrastructure including road, rail and air networks is a growth-enhancing asset of any region. Eastern Poland shows a very low level of spatial accessibility (Figure 12). In 2008 only Świętokrzyska Land could boast of a road (but not rail) network denser than the national average; the situation was the worst in Warmia-Mazuria and Podlasie.

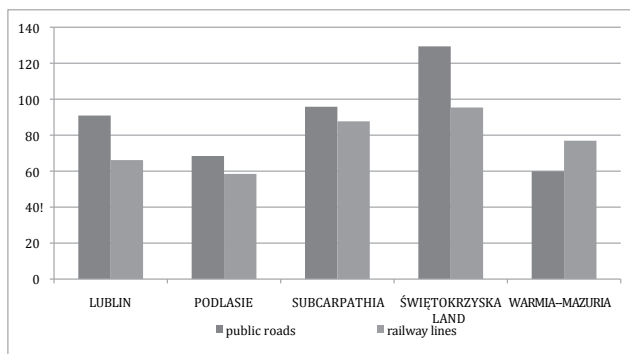
The map in Figure 13 presents (in per cent) the spatial accessibility of rail passenger services to the Polish population, calculated using a special index. It clearly shows East Polish residents to be seriously handicapped in this respect. An improvement in the territorial cohesion of this area can be achieved, among other things, by (1) making the rail network denser, and (2) opening rail connections with the neighbouring voivodeships.

Eastern Poland's spatial accessibility is in fact one of the lowest in the entire European Union, and one of the chief factors hampering the performance of this part of the country. As Figure 14 shows, its accessibility to the nearest metropolitan European growth areas (MEGAs) as described by travel time in minutes ranges from 180 to under 300. Eastern Poland is simply a peripheral region of the European Union.

Towards a better future of Eastern Poland

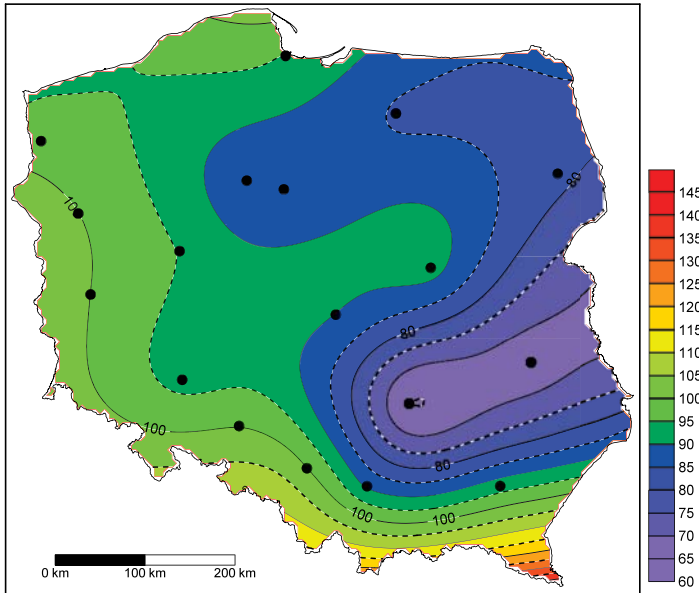
The current socio-economic situation of Eastern Poland is a matter of concern not only for the local authorities, but also the Polish government and the Europe-

Figure 12. Road and railway line density, 2009, Poland = 100.



Source: own compilation.

Figure 13. Spatial accessibility of rail passenger services to the Polish population (%).



Source: own compilation based on Skopiec (2011).

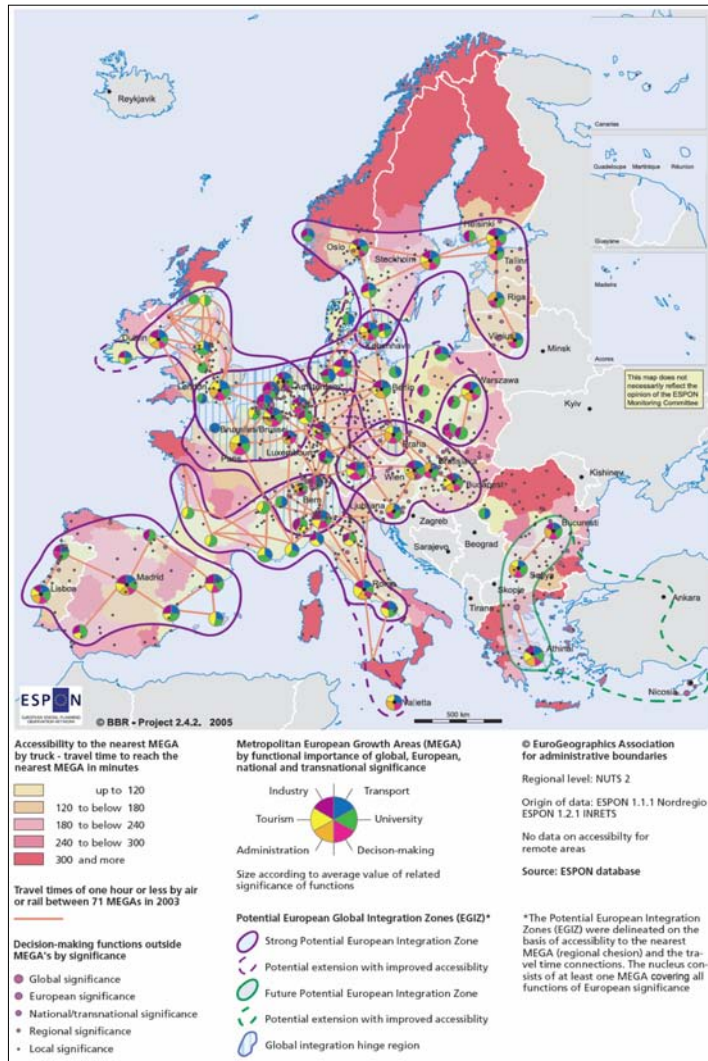
an Union institutions in charge of regional development. In line with its cohesion policy, the European Union has decided that under its 2007-2013 budget Eastern Poland will be a beneficiary of a special instrument targeted at the least favoured Community areas. To this end, the government has prepared an action plan referred to as the Development of Eastern Poland Operational Programme. The programme embraces six priorities and a number of measures (Figure 15).

The priorities include:

- stimulating the growth of the knowledge-based economy,
- greater access to the broadband Internet in Eastern Poland,
- development of selected metropolitan functions of voivodeship capitals,
- improved accessibility and quality of communication links in the voivodeships of Eastern Poland,
- strengthening the role of sustainable tourism,
- streamlining the implementation of the Eastern Poland Operational Programme.

Because of the peripheral location of Eastern Poland both in Poland and the European Union, the programme's most significant goal (although not one with the biggest allocated budget) is the development of transport infrastructure. The expected result is a series of roads connecting Eastern Poland with the rest of the country, especially with the capital city (Figure 16). The hierarchy of the remaining goals is the development of infrastructure supporting metropolitan functions and infrastructure facilitating the knowledge-based economy.

Figure 14. Potential Integration Zones, their accessibility and profiles.

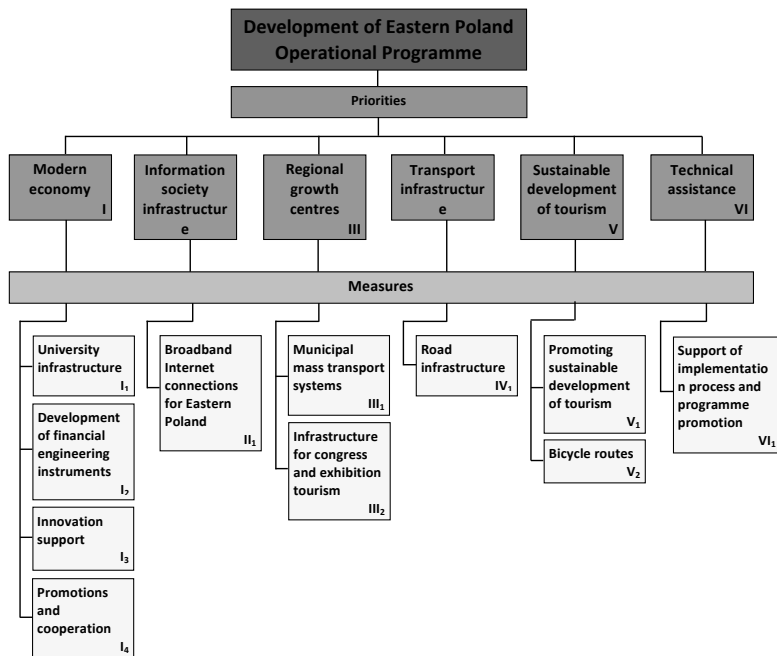


Source: ESPON (2006).

The centrally run Eastern Poland Operational Programme has a budget of EUR 2,675.05 million, with EUR 2,273.79 coming from the European Regional Development Fund (ERDF) and EUR 401.26 million from domestic public funds. The means are further broken down by priority:

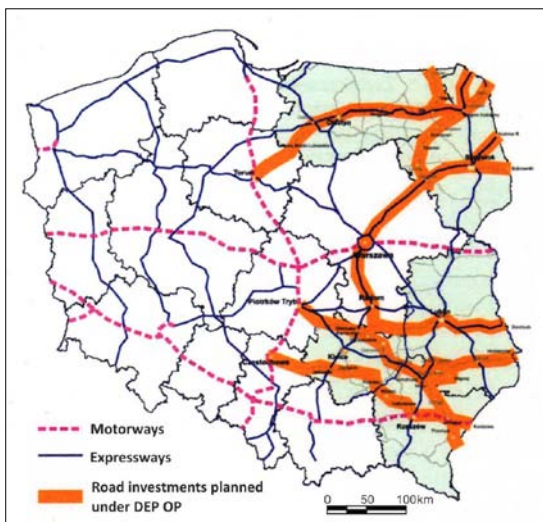
- Priority I - Modern economy: 34.74%,
- Priority II - Information society infrastructure: 11.22%,
- Priority III - Regional growth centres: 19.91%,
- Priority IV - Transport infrastructure: 29.04%,

Figure 15. Priorities and measures in the Development of Eastern Poland Operational Programme.



Source: Program Operacyjny Rozwój Polski Wschodniej 2007-2013.

Figure 16. Road routes set in the Development of Eastern Poland OP and the national road pattern.



Source: Program Operacyjny Rozwój Polski Wschodniej 2007-2013.

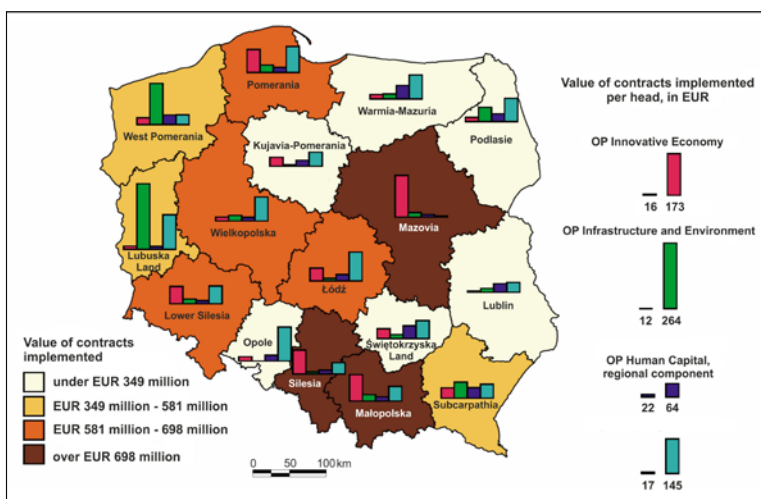
- Priority V – Sustainable tourism based on natural conditions: 2.09%, and
- Priority VI – Technical assistance: 3%.

It should also be emphasised that 49% of the domestic public funds employed are contributed by local governments. The voivodeships of Eastern Poland can also resort to funds under their own Regional Operational Programmes and those of the (centrally run) National Operational Programmes. These include: the Infrastructure and Environment OP, Human Capital OP, Innovative Economy OP, European Territorial Cooperation OP, and Technical Assistance OP (Figure 17). In 2007-2013 Eastern Poland will receive a total of nearly EUR 13 billion (at 2004 prices).

The next period of the European Union's policy and budget programming will be 2014-2018. As the allocation of finance is based on the n+2 principle, the next financing period can be assumed to be 2014-2020. According to reliable scenarios, at that time Eastern Poland will receive similar support, i.e. EUR 13 billion from the EU and EUR 4.5 billion from Polish public funds (a total of approximately EUR 30 billion over 2007-2020 at 2004 prices).

A substantial allocation like this, accompanied by numerous unknown marginal limitations, calls for careful but bold operation, supported by a far-sighted vision of growth in the form of a strategy. Such a document has been developed for Eastern Poland by world-renowned professors: Jacek Szlachta, Janusz Zalewski and Wojciech Dziemianowicz. It is entitled "Strategy for the Socio-Economic Development of Eastern Poland until 2020". It is a detailed document revolving around the main goal of boosting social, economic and territorial cohesion over

Figure 17. Value of contracts implemented under the OPs Innovative Economy, Infrastructure and Environment, Human Capital - regional component, and Regional Operational Programme, by voivodeship (mid-2009).



Source: Małopolskie Obserwatorium Polityki Rozwoju (2009).

the years 2007-2020 in Eastern Poland as a whole and in each of the five voivodeships of the macro-region, in accordance with the rules of sustainable development. The strategy will be implemented by means of priority action packages:

- Enhancing human capital,
- Building up an a knowledge-based information society,
- Supporting the economy and SMEs,
- Improving transport accessibility in Eastern Poland by providing transport infrastructure,
- Taking advantage of the region's location along the outer border of the European Union; development of cross-border cooperation,
- Supporting the metropolitan functions of the East Polish towns, and
- Conservation and use of environmental resources and protection of the region's biodiversity (see *Strategy for the Socio-Economic Development of Eastern Poland until 2020: Information booklet*).

The strategy develops these packages in detail and hence is a valuable document for practical implementation.

Conclusions

Eastern Poland is one of the poorest terrestrial regions of the European Union. Its markedly lower level of socio-economic development is an effect of both exogenous and endogenous factors. Even in the pre-accession period domestic steps were taken to stop its advancing pauperisation, but the region received a new powerful growth impulse only after Poland joined the EU. Thanks to the European Funds and the associated Polish public means, Eastern Poland has a chance to reduce the difference between its socio-economic development and that of the most advanced Polish – and in future also European – regions.

Still, as follows from the latest theoretical conceptions (see World Bank's *WDR 2009: Reshaping Economic Geography*), economic growth will remain spatially uneven at the global and the regional scale as a result of accelerating agglomeration mechanisms. That is why efforts should be made to use agglomeration advantage to enhance welfare in poorly developed areas, rather than equalising the distribution of economic activity. And this also is the chief message of the *Strategy for the Socio-Economic Development of Eastern Poland until 2020*.

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