Factors determining the development of peripheral areas

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Abstract: This paper reviews the main criteria for classifying the eastern Polish border region as a peripheral area. Apart from geographical location economic, social and cultural criteria have also to be considered. The article refers to the economic, social and cultural conditions of local development. The main direction of development of the eastern Poland is agriculture. The area is also characterized by low population density. This hinders the development of the area. It can also be an advantage, especially bearing in mind tourism development. The paper discusses selected factors determining the development of eastern Poland. The emphasis is put on their diversity and the fact that the interpretation of their actual impact remains inconclusive as it is in the case of the border itself. The boundary state can be both a barrier and a stimulating factor. The analysis justifies the conclusion that each of these factors contributes to the development of border areas. The strength of their impact depends on the strategy of development. This article uses an analysis of source materials, as well as the author's own observations arising from years of research conducted in this area.

Keywords: development factors; peripheral areas; eastern Poland.

Introduction

Clearly, the environment of the border determines the development of the neighboring areas. According to Więckowski (2010) borders are primarily barriers (spatial, economic and political). They act as a filter, but they are also the contact zones between neighboring countries. Socio-economic and political changes in Europe, mainly in the countries of the European Union, lead to the marginalization of the function of boundaries. The processes are most advanced in the Schengen area.

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The situation of eastern Poland is particularly interesting as for 20 years the permeability of the border first increased significantly (in the early 90s), and then it slowly sealed (mainly after 1 May 2004). Thus, the analysis of factors determining the development of peripheral areas is illustrated with the example of the Polish eastern border provinces. The main purpose of this article is to discuss factors influencing the growth of eastern Polish border region. The study applies a deductive and reductive research approach. The conclusions derived from secondary data analysis have been partially verified by the author's own empirical research. The article uses the method research desk - an analysis of the literature and statistical studies. A critical analysis of the available literature was made. In formulating assessments, the author benefited from her research experience. Research on the eastern border of Poland has been conducted since 1999.

Polish eastern border region as a peripheral area

The term "periphery" can be seen in three contexts: geographical, economic and legal (Moraczewska, 2008). Grosse (2007) proposes a review of definitions of the term "periphery". In the opinion of this author peripheral regions are areas: 1) sparsely populated, distant from economic centres and with restricted access to them due to poor transportation; 2) characterized by a low level of economic development (in the EU it is measured with GDP in purchasing power parity); 3) dominated by labor-intensive industries including agriculture and forestry; 4) characterized by underdeveloped infrastructure and a low level of entrepreneurship and innovation.

All these features are characteristic of studied area. One can also analyze the economic dependence of peripheral areas on economic and political centers and their distinct cultural, religious and political individuality. According to Bański et al. (2010) it has been widely recognized that "[...] the eastern border region in our country shows the typical characteristics of geographic and economic periphery". This area has long been called "the eastern wall", "Poland B", and "a problem area" in the studies published by the Institute of Rural and Agricultural Development (Rosner, 2002; Kłodziński, 1999).

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Numerous studies provide credible evidence that the area situated along the eastern border meets the criteria set for a periphery (Dziemianowicz 2008). For example, Operational Program for the Development of Eastern Poland (OP DEP): lists the characteristics of this area, which allow us to classify it as peripheral:

- low level of wealth (measured by GDP per capita the average in Poland 10,097 EUR in border regions: Podlaskie 7,160 EUR, Subcarpathian 6,760 EUR, Lublin 6,880 EUR (GUS, http://stat.gov.pl);
- low level of spatial, social and economic coherence;
- ineffective economy structure with a predominance of traditional agricultural production, low level of entrepreneurship and the relatively low level of competitiveness and innovation;
- insufficient potential of growth centers stimulating local development, including well developed urban agglomerations with metropolitan functions;
- underdevelopment of infrastructure of higher education and a poor relationship between science and economy;
- low level of development of technical infrastructure (mainly telecommunications and transport) and poor accessibility of the area.

An important problem in border areas is migration (W. Leimgruber, 1999). In border areas above all an overspill is appearing, of particularly young persons. It affects the development of this area negatively.

Characteristics of eastern Poland

The least populated province is Podlaskie in eastern Poland which occupies 14th position in the national ranking and in terms of population density ranks 16th.

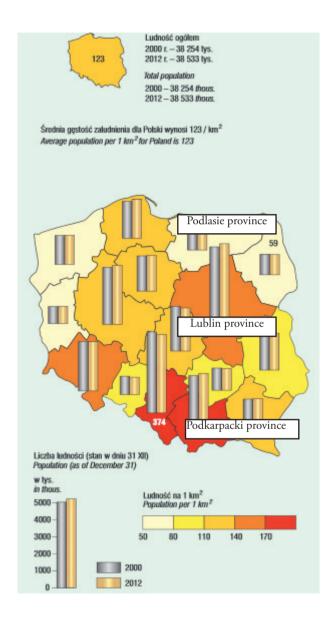


Figure 1. Population and population density regions in Poland

Source: Central Statistical of Poland, 2013. p. 556.

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The greatest population density is in Podkarpackie (7^{tth} position in the national ranking). This province has also the highest (58.6%) share of people living in rural areas, which in the provinces of Lubelskie and Podlaskie amounts to respectively 53.4% and 39.4%.

Table 1. Development and population of the eastern Polish provinces in 2012 (own elaboration based on Central Statistical Office data from the series Local Government Statistical Handbook, www.stat.gov.pl)

		Share in the area (in %)					Population	
Provinces	Area in sq. km.	Agri- cultural land	Wooded land	Land under water	Deve- loped land	Eco- logical land and fallow	Total (in thou- sands)	Per 1 sq.km.
Podlaskie	20187	60.3	31.8	1.4	3.6	2.9	1188.3	59
Lubelskie	25122	70.8	23.6	0.8	3.6	1.1	2151.9	86
Podkarpackie	17845	53.9	39.8	1.1	4.3	0.9	2103.5	118

The unemployment rate in all studied provinces (Table 1) is higher than the national average which, at the end of December 2013, reached 13.4%. In studied provinces it amounted respectively: Podlaskie – 15.1%, Lubelskie – 14.4% and Podkarpackie - 16. 4%. (http://www.stat.gov.pl).

The analyzed provinces are primarily agricultural-forestry areas, as shown in Table 1. The Lubelskie province has the largest share of agricultural land and Podkarpackie has the largest share of forests and forest land.

Conditions for the development of peripheral regions in eastern Poland

"It can be assumed that factors determining growth are elements of the structure of the territory, which are or may be activated to enable operations in the field of production, distribution, circulation and consumption" (Strzelecki, 2011). In literature we find a number of classifications of determinants of local and regional development (Geise, 2009; Dziemianowicz, 2008; Strzelacki, 2011; Zakrzewska-Półtorak,

2010; Przygodzki, 2007; Parysek et al., 1997). Due to the limitations of this study the analysis of each classification cannot be provided. Therefore the categorization proposed by Parysek has been adopted.

Parysek (1997) observes that some factors "are universal, while others are activated only in certain places and certain moments in time" (Parysek, 1997). The needs of local community are listed among the key factors determining local development. "Every economic development, including local development, is directly related to meeting the growing needs of the society [...] and is simply determined by these needs" (Parysek, 1997). It applies to common needs, typical for all people regardless of their demographic characteristics and place of residence rather than individualized needs originating in beliefs, standard of living and culture. The needs which predominantly influence local development can be divided into the following groups: 1) existential (related to the functioning of households); 2) residential (involving the increase in the number of affordable houses improving the quality of life); 3) cultural (related to secondary education and high culture); 4) social (related to specific social groups, such as children, seniors, people with disabilities and large families). One can assume that most needs are universal.

Due to the character of the border area, security needs (which belong to existential needs) may appear to play a key role. A survey was conducted among residents of border communities in 2006 under the KBN/MNiSW 2P06R09628 project in the following communes: Szypliszki, Giby, Płaska, Krynki, Dubicze Cerkiewne, Mielnik, Rokitno, Wola Uhruska, Dorohusk, Horodło, Lubycza Królewska, Hrubieszów, Horyniec Zdrój, Radymno. In 2012, it was repeated within the framework of statutory research of Warsaw University of Life Sciences. It showed that only 25% of 650 randomly selected residents see risks related to the proximity of the border. In 2012, the survey was repeated, and this share amounted to 30.9% (sample consisted of 600 people).

The natural environment is another important factor determining the local development. This category includes, in particular:

• Raw materials - coal seams (Lublin Basin), oil and gas (Carpathian Basin), chalk in the Podlasie region, (especially in the area near Mielnik).

• Mineral water - mineral water deposits are located in all border provinces. Many of them are bottled and distributed all over Poland (e.g. Krynka, Cisowianka). Some are used in spa medicine, e.g. in Horyniec or PolanczykZdrój.

- Surface water and groundwater in the broad sense. All production branches use significant amounts of water. Its quantity and quality also affects the standard of living of local residents. Surface water is also an important tourist asset determining the attractiveness of the area and the development of tourist infrastructure. Bug River is a natural hydrographical Polish border.
- Climatic conditions significantly determine the economic and social development. This applies in particular to agriculture, construction, transport and tourism. The unique climatic qualities are also used by medical spas.
- Soil structure it varies along the border, but taking into account the average in all border provinces the area has the largest share of Class IV soils (46% in Podlaskie, 37.25% in Lublin and 42.85% in Podkarpackie), and the share of soils classified as Class I-III is the highest in the province of Lublin (39.74%), followed by Podkarpackie (29.65%) and much lower in Podlaskie (6.9%) (RocznikStatystycznyRolnictwa, 2011, GUS).
- Wildlife and wooded areas. Forest is not only a source of timber but regulates water economy and has a beneficial influence on residents living in the vicinity (air purification, noise reduction). It is also a source of fruits of the forest, which is important especially in regions at risk of poverty and poor regions.

Most of these elements of natural environment are classified in the group of natural assets. This category also includes terrain, wildlife (especially protected species), as well as protected species and communities of plants. Exchanged elements of the natural environment are complementing each other mutually, and their meaning development dependent on accepted direction. These elements are appearing in the corner step on the remaining border area, particularly in length border west. However the quality of the natural environment on the eastern borderland is highest in Poland.

Another important factor determining local development is human capital, including: 1) age structure of the population (including the

contribution of individual economic groups); 2) economic activity; 3) employment rates; 4) the level of education, professional qualifications and occupational structure; 5) wealth of the population; 6) health status of the population (Markowski, 2008). Nowadays, the term social capital (a broader concept of human capital) is increasingly in use and is defined as "skills and physical, mental and intellectual abilities used in the economic life" (Potoczek and Stepien, 2008). It is spatially variable and, as noted by Markowski (2008), social capital (also known as relational capital), is not "any new economic category, but an asset whose importance in the modern organization of socio-economic processes is growing steadily. By enhancing relational capital it is possible to boost the local economy. The attributes of social capital include (Markowski, 2008):

- economic and social responsibility and willingness to save money;
- willingness to take economic and professional risk;
- entrepreneurship and hard work;
- openness to new ideas;
- willingness to learn and broaden the knowledge;
- readiness for cooperation and exchange of experience, confidence in institutions and partners on the market;
- pro-social attitudes;
- social discipline and willingness to conform to social norms;
- the ability to compromise and dialogue, understanding the necessity to meet the priority needs in the process of cooperation.

Determining the attributes of human capital is easier than in case of social capital, which belongs to the scope of sociological research. According to the data contained in the "Strategy of Socio-Economic Development of Eastern Poland 2020" (www.mir.gov.pl) the level of human capital is insufficient. The author's own research shows that only 14.7% of residents of border communes declare the need to increase qualifications. It is a small part. For example, in Western Pomerania participation of people participating in training is 44.4%. (www.ewaluacja.gov.pl).

Another significant factor determining local development is the state of technical and social infrastructure also called infrastructural investment (Parysek, 1997). Technical infrastructure development directly enhances

the quality of life of local people, facilitates business operations and is an important argument for new investors to choose the site. The villages with border crossing points have better developed infrastructure. The rest of the area is continually developed, however the progress is still insufficient (Wesołowska, 2011).

Local development also depends on economic potential. "Diversified economic structure creates the atmosphere for local development, the atmosphere in which conditions are created for new entities to start business operations, conditions for cooperation with other entities and conducting complementary actions" (Parysek, 1997). Naturally, cities have greater economic potential, particularly those whose development is multi-functional. M. Slusarciuc stresses that the important issue of economic potential are small and medium-sized enterprises (M. Slusarcius, 2012) Rural areas due to the poorer socio-economic financial, educational and political structure are characterized by a much lower potential. On the eastern border the level of economic potential is positively correlated with the level of development of tourism (Transgraniczne).

Parysek (1997) argues that to recognize a market as a factor in local development is legitimate. He highlights the bipolarity of relations on the market (supply and demand). There is a local market and external markets. "The second type of market orientation in local development is enabled especially by the use of unique local resources, unique manufacturing skills of the residents, professional traditions, heritage, local culture, etc." In the study area these conditions are met only in case of tourism (influx of tourists from other regions of Poland and foreign tourists) and trade (demand for products from the citizens of neighbouring countries).

Also science and culture play an increasingly important role in determining local development. Scientific and cultural institutions are usually located in big cities. Although the EU assistance programs stimulate scientific and cultural activity in the study area it is accumulated mainly in the capitals of provinces. It is Kostro who is an advocate of inclusion of broad cultural context in economic studies and refers to Edward Hall's proxemics (Kuciński, 2011). Culture has a significant impact on decision-making processes, the location of business investments and finally on local

development. "Local cultural conditions become factors determining business location, [...] they transform other location factors, especially the soft ones[...], influence the perception of their benefits by the culturally different investors" (Kuciński, 2011). Culture of the study area is different than in any region of the country. It is connected with the history of this area, and most of all the changes of borders and population inhabiting different nationalities (Poles, Belarusians, Ukrainians, Jews, Tatars) and religion. This cultural diversity is used primarily in tourism development. It also results in greater openness and tolerance for other people, which has a positive effect on the development of the area.

Bearing in mind that the study area is located along the border of Poland, it would be justified to focus more on the location itself. "The benefits of a location, however complex in their nature, are a factor determining local development" (Parysek, 1997). The location of rural communes relative to urban transportation routes and tourist attractions is a major factor influencing the scale and direction of their development. Usually, in literature, the term "location rent" is used, which can be defined as "potentially more or less tangible benefits of the location of an entity (such as a commune)" (Bartkowiak and Ossowska, 2010). Szewczuk (2011) uses the term "location benefits" and stresses that "villages and communes are considered attractive if they have unique assets and favorable location, regardless of whether they are natural assets, accumulated capital or economic potential". Parysek lists the characteristics of a site that determine its value and economic potential: the location in the country (relative to national borders, border crossings, ports, major routes and hubs, business centers), technical infrastructure and the possibility to develop it, the type of soil and its agricultural utility (Parysek, 1997). It is difficult not to agree with the statement of J. Parysek, that the particularly attractive sites include those "with unique assets and favorable location, regardless of whether they are natural or developed" (Parysek, 1997). An interesting approach to border location is provided by Bartkowiak and Ossowska (2010) who, relying on Domański, argue "borders are an essential element of today's economy [...]. They have multiple impacts on both international and inter-regional relations. Borders separate natural resources, and often act as a filter, reducing the number of interactions between the regions. Therefore, the location near the border, or along the borders separating neighboring countries may prove advantageous.". Similarly, other authors treat the border as "a source of location benefits stimulating local development" (Bański at al., 2010). The benefits derive from products and services provided to transit travellers and residents of neighboring countries and are visible mostly near border crossings. Also, the study prepared for the Ministry of Regional Development concludes that "Polish eastern border location provide both opportunities and threats for the region" (Transgraniczne). The research study conducted by the author in border communes in 2012 shows that 39.7% inhabitants of the border areas recognize the benefits of the border proximity related to the development of trade and tourism.

K. Kuciński's team proposes an interesting approach to location attributes. Analyzing local development in the context of globalization they introduce the term "glocalisation", which is a synthesis of two concepts: globalization and localization. "It draws attention to the importance of local action and its place in the globalization process, as well as the importance of globalization in local development strategies" (Kuciński, 2011). In his discussion of the relationship between location and globalization, Kuciński cites scientific axioms of globalization, including the axiom of glocalisation, according to which "globalization makes it possible for the local communities to fully participate in this process. It creates a chance to overcome the isolation and economic and civilization backwardness for many regions which are underdeveloped, forgotten or even excluded from the globalization processes" (Kuciński, 2011). At the same time the author questions the truth of the axiom quoted, because, as he rightly observes, both foreign and domestic businesses tend to invest in relatively more developed regions.

Another major factor in local development and regional growth is international cooperation, which can be both financial and advisory in character. Financial support may include attracting foreign investors, but also the use of assistance funds. Consulting includes training, know-how or town twinning. Border areas, due to their location, can take advantage of cross-border cooperation within the framework of Euro-regions. Along the eastern border there are four Euro-regions: the Neman, Bialowieza Forest, Bug and Carpathian. The activities of Euro-regions is the most positively evaluated (Borshch, 2014). The level of this cooperation was discussed, *inter alia*, in documents prepared for the Ministry of Regional

Development (Transgraniczne). Deppisch is an interesting example of cooperation between border areas (2012).

There are more factors determining local development, which should certainly be mentioned like the role of local authorities, state policy and the EU role in the development of peripheral areas. This issue, however, is so extensive that requires a separate study. The development of the border areas is also affected by global crises. Despite the crises, in the years 2007-2010 Poland was not adversely affected (Ignasiak-Szulc and Kosiedowski, 2011).

An important factor in the development is of course the political situation in Ukraine. While western Ukraine is not covered by military activities, but anxiety prevailing in the country affects arrivals residents of Ukraine to Poland. It also affects the cooperation of Polish companies with businesses in Ukraine. In this case the limit is primarily a barrier to development.

Conclusion

The Polish eastern border region is widely regarded as an area of unique development potential. Due to many years of investment neglect and the particular character of a border region, the main factors determining local and regional development are endogenous. These are mainly natural, cultural and social resources. The role of the border in local development is still disputable. In the opinion of the author it can be both an opportunity and an obstacle to the development of the neighboring areas. In the literature, the many factors in the development of peripheral areas are investigated. According to the author, these factors are mutually reinforcing. Each of them is important, but the most important is the individual (human capital), which is able to use other factors.

It is also difficult to answer the question if without the stimulation from the outside this region will develop. Previous experience with the use of various international instruments leads to the conclusion that it would be a difficult task. Sparse population and lack of industrial centers can be used in the development of tourism. The situation of the study area is also special because it is the eastern borderline of the European Union. The political situation in Ukraine also affects negatively the area. It is difficult to say what will be the direction of the development of the area after the accession of Ukraine to the EU.

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