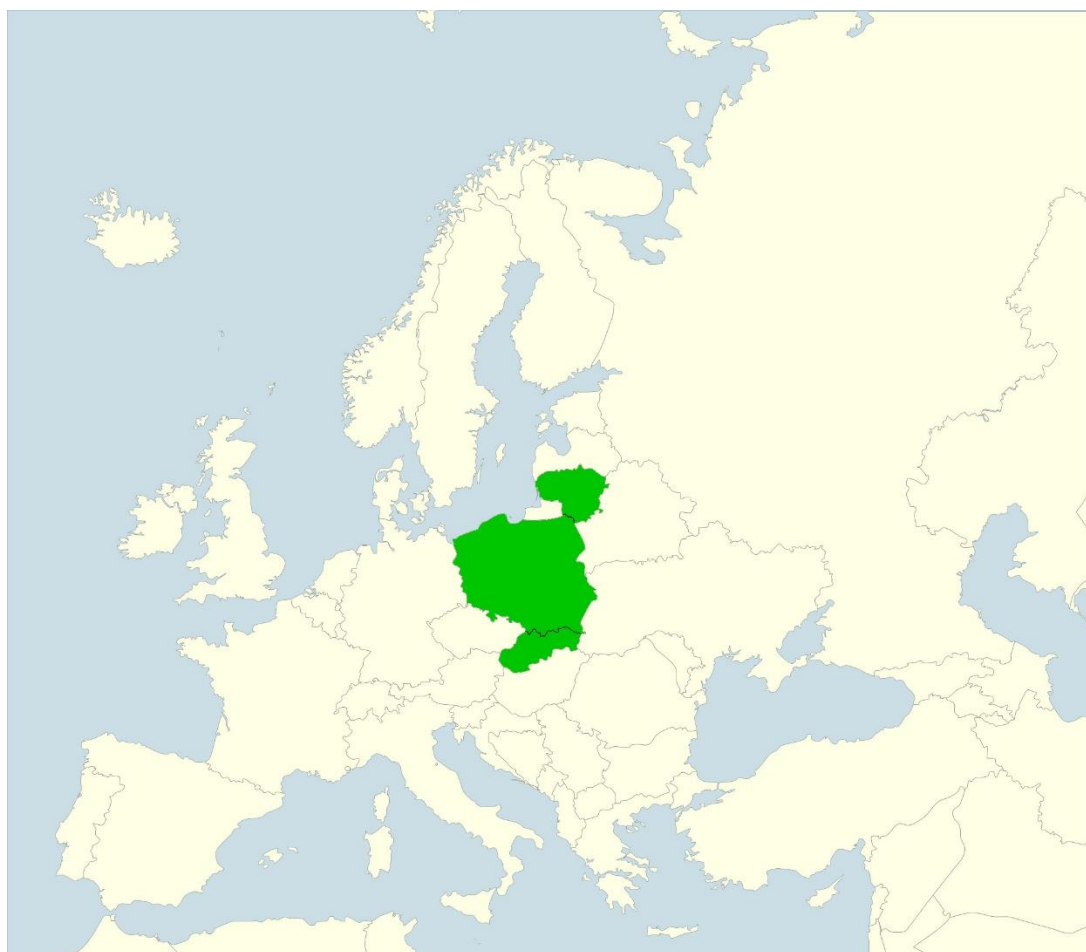


SOCIAL AND SPATIAL RELATION BETWEEN SMALL TOWNS AND VILLAGES IN PERIPHERAL REGIONS: EVIDENCE FROM LITHUANIA, POLAND AND SLOVAKIA

Agnieszka Jaszczak¹, Gintare Vaznoniene²,
Katarina Kristianova³, Vilma Atkociuniene⁴



¹ Assoc. Prof. Agnieszka Jaszczak, University of Warmia and Mazury in Olsztyn, Poland, e-mail: agnieszka.jaszczak@uwm.edu.pl, ORCID: 0000-0002-4695-0488

² Assoc. Prof. Gintare Vaznoniene, Vytautas Magnus University, Kaunas, Lithuania, e-mail: gintare.vaznoniene@vdu.lt, ORCID: 0000-0001-9583-112X

³ Dr. Katarina Kristianova, Slovak University of Technology in Bratislava, Slovakia, e-mail: katarina.kristianova@stuba.sk, ORCID: 0000-0003-0103-2357

⁴ Prof. Vilma Atkociuniene, Vytautas Magnus University, Kaunas, Lithuania, e-mail: vilma.atkociuniene@vdu.lt, ORCID: 0000-0001-6908-9339

Abstract: This article deals with the important issue concerning that small towns and villages play an important role in the development of many European regions, not only from the point of view of agricultural function, but also due to the preservation of identity and heritage as well as social relations and management of spatial structures. On the other hand, in small towns and villages, there are growing problems related to the migration of people to big cities, leaving farms and villages. Progressive unemployment is observed, especially in peripheral areas. The research question is: what are the similarities and differences of social and spatial relations between small towns and surrounding villages in the selected countries? The article aims to present the interface between social and spatial relationships in small towns and surrounding villages in the context of analyzing the potential of rural areas and models for their development. Authors compared the specificity of small towns and villages of selected regions of Poland, Lithuania, and Slovakia. The following methods were used in the research: analysis and synthesis of literature and documents (legal and strategic), descriptive method, secondary data analysis, comparative method, visual data representation, case study.

Key words: social and spatial relations, small towns, villages, urban-rural relations, peripheral region

Highlights:

- There are differences in legislative definition and categorization of towns and rural settlements in the examined countries.
 - Small towns up to 10,000 inhabitants play an important role in the settlement structure; of the examined regions.
 - Small towns benefit from rural areas in mutual relationship.
-

1. Introduction

Small towns and surrounded villages, compared to larger cities, are a specific group of settlements with weaker performance in many aspects of economic development. The results of multidirectional research on a global as well as European scale show that in rural and peripheral areas, intensively progressive changes in space are noticeable, mainly due to economic and socio-demographic problems. On the other hand, it is the small towns and villages of many European regions that constitute structures with rich socio-cultural and natural potential. The issue of describing small towns' concept aroused the interest of scientists as well, because this concept varies among different European countries. Therefore, the article presents the role of specific structures in rural areas (small towns and villages) in determining the social and spatial potential, which is the basis for the competitiveness of these areas, e.g. in relation to large agglomerations and large cities. However, these considerations do not focus directly on determining competitiveness, but rather relate to the definition of socio-cultural and spatial links between small towns and villages in the context of marking these structures into a single entity having greater competitive power than a single settlement unit. What is special about these considerations, the authors undertook a comparative analysis of the relationship between small towns and villages in 3 different countries, in Poland, Lithuania, and Slovakia, to draw attention to the specificity of various European regions.

The research question is: what are the similarities and differences of social and spatial relations between small towns and surrounding villages in the selected countries?

The research object – the relationship between small towns and the surroundings (village) in different social and spatial regions.

The aim of the research is to analyse the structure of small towns and village units in the context of defining the relationship between them and to define their role in regional and supra-regional development in each of the analysed countries.

The following assumptions were made:

- Most studies on the urban-rural relationship focus on the socio-economic interaction, often prefer the economic factor over the social factor. However, in the analyses we have conducted, we cannot completely separate ourselves from economic issues, because they often constitute the basis for development, in further considerations we wanted to emphasize the socio-spatial relations referring to the preservation and protection of structures characteristic of rural areas.
- Small towns and villages in the analysed countries differ in terms of size, number of inhabitants, spatial structure, social structure, as well as natural and cultural values. The essence of the research was to recognize the specificity of these structures and to identify the similarities and differences between them. Therefore, the research was carried out in small towns and villages in peripheral regions.
- The phenomenon of peripherality in the indicated regional examples, although less favourable from the economic and demographic point of view, in comparison to big cities, may have a positive impact on the preservation of traditional spatial structures and forms, as well as socio-cultural values of selected regions.
- The development of rural areas, including small towns and peripheral villages is based on directions opposite to the directions of development of large cities, and therefore these areas may be somehow competitive.

Based on the results, recommendations were formulated.

The article structure is based on several key aspects related to the topic. It describes the research field problems and situation, research methods, and the results. The discussion looks at theoretical aspects focusing on aspects of urban-rural interaction, suburbanization, and peripherality, problems in rural areas, the perception of small town and village structures in various legislations and with reference to real conditions in the analysed countries, as well as directions of competitiveness of peripheral rural areas in relation to central units.

2. Theoretical background

2.1 Urban and rural interaction

There is such a uniqueness as *urban-rural interaction*, which is the opposite of the concept of rural integration into industrial society, new rural functions, urban-rural interdependence. Problematic concepts such as the rural community and the cultural landscape have begun to be explored as the interdisciplinary approach in related fields: rural economy, demography, geography, architecture and planning, and political science (Loomis and Beegle, 1950; Piorr et al., 2015; Pociūtė-Sereikienė, 2019). It must be noted that also interconnection between urban and rural areas, their hierarchy, and functions is analysed interdisciplinary. From this, two different concepts have evolved: *urban-rural dichotomy* (i.e. urban-rural isolation) and *urban-rural relations*, (i.e. integration of urban and rural areas into one system).

Territorial distribution of urban and rural areas has been developing for many years. Influenced by migration flows, demographic changes, the status of these areas has been changing constantly. Following Kresl and Ietri (2016) and Novotný et al. (2016), towns had been developing as centres of the market, crafts industry, and services subsequently for many years, until gradually they had created a network that is specific for each country itself. Up until now, it is known that an area can be changed if some particular features of the area change – mostly it is related to population.

As Novotný et al. (2016) mentioned, the towns are hierarchized at different scales. The important role falls to the capital and large cities, which provide most functions to the citizens, however, little attention has been paid to smaller towns located in the peripheral regions of the country. Despite

rural or urban character, both types of settlements have the administrative function which enables these areas to act in various domains of life: social, economic, cultural, etc. Knox and Mayer (2009) pointed out that when small towns focus on their specific characteristics and exploit their opportunities, they can become niches or centres with various scales, mainly regional economies. Their strengths are reasonable by their own identity, sociable and enjoyable way of life for their inhabitants, and traditions. For further considerations of this article, it is therefore important to present two directions of mutual relations between the city and rural areas, which can be observed to a varying degree on a European scale, also in the countries analysed by us. These directions are suburbanization and peripherality. They have a different impact on socio-spatial transformations, while suburbanization causes, in the suburban space (formerly often agricultural), the appearance of functions directly related to a large city (concentration of structures, unification, blurring of boundaries). On the other hand, peripherality is understood in a general way as an economically unfavourable phenomenon, but from the point of view of maintaining social relations (traditions, customs, culture) and spatial structures (e.g. dispersion, layouts of small towns and villages, regional architecture), it is a desirable phenomenon (Fig.1).

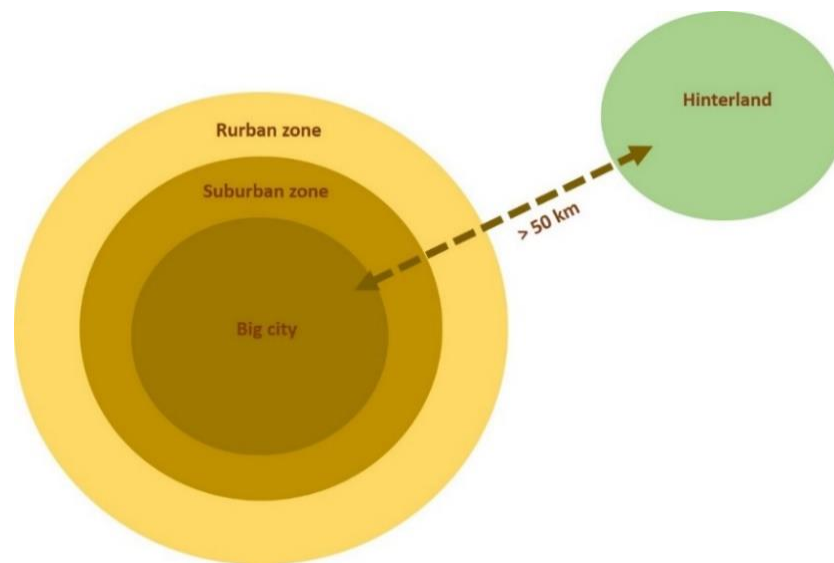


Fig 1. Relation between urban and rural areas. Source: authors

2.2 Suburbanization

Towns very often transcend their administrative boundaries and form entire low-rise construction sleeping areas, logistics centres, and other urban infrastructure. This is radically changing the traditional face of suburban areas, some of which are already difficult to classify as both urban and rural. In some countries, an artificial term has even emerged to describe these areas, describing this type of intermediate between rural and urban area: for example, the French "rurbain" (combining "rural" and "urbain"), the English "rurban". This tendency can be found near the big cities in Lithuania (Vilnius, Kaunas), Poland (Warsaw, Łódź, Krakow, Wroclaw, Poznan, Gdansk, Szczecin, Bygdoszcz, Lublin, Katowice) and Slovakia (Bratislava, Kosice), also in medium-size towns in Poland, and some of the medium-sized towns in Slovakia. They are undergoing extremely rapid change, the traditional village is fundamentally changing, urban and social contrasts are becoming more and more apparent, and sometimes opposites.

2.3 Peripherality (hinterland areas)

The conceptualisation of peripheral area or peripherality in this article is followed by the experience of selected countries for the research. This enables us to compare and identify the key features which are characteristic for Lithuania, Poland and Slovakia. It is observed that scientists from these countries explore some common features which reveal the essence of peripheral area or peripherality. A peripheral area in Lithuania is perceived as the outskirts of

a country or city, or an area remote from the capital or another major city (Rakucevičius, 2003; Pociūtė, 2014). According to Daugirdas and Burneika (2008), this is the whole remaining territory that does not belong to the centre, so the term periphery itself is quite relative and is often explained using a comparison of the values of social, economic, cultural, or other indicators. Tautvaišaitė (2007) considered periphery to be a rural area away from the capital or another large city, where there is depopulation, which is less developed, and the majority of the population work in the primary economic sector, which requires more intensive manual labour. Pociūtė (2014) and Pociūtė-Sereikienė (2019) summarized that periphery is a space that is quantitatively and/or qualitatively distant from the centre, which is characterized by a lack of integrity with the existing territorial system and the centre. Moreover, her attention was focused on that the appearance of peripheries is claimed to be a consequence of peripheralization (Pociūtė-Sereikienė, 2019), which is perceived as an increase in socio-spatial inequalities, the 'production' of peripheries, whereas peripherality is the characteristic of a territory, indicating the distance (expressed in statistical values) from the centre. In Poland, peripheral areas are usually designated both based on spatial criteria (concerning the geographical and communication location) and economic (concerning a low socio-economic level). According to the spatial criterion, these are areas remote from economic centres and difficult to access in terms of communication. In this respect, the deepening division of Polish space into metropolitan areas (core) – which was the main beneficiary of Poland's economic development after 1990, and extra-metropolitan areas (periphery) – characterized by a low growth rate, is particularly important. Therefore, according to economic criteria, peripheral areas are identified with poorly urbanized areas, with low population density and a low level of economic development (Rudnicki, 2011). Peripheral areas are, for example, Podlasie, or Warmia and Mazury. In Slovakia, peripheral regions are delineated based on four groups of indexes: human resource, economic potential, household facility, and accessibility of centres. A continuous area of five municipalities identified in the lower quintile in a given group of indexes is labelled a peripheral region. In case a region had worse values of indexes in three or four groups, it is marked as a region with a cumulative peripherality. The worst values of peripherality indexes are seen in the south part of central Slovakia and the eastern parts of Slovakia (Halás, 2008). They can be found in a micro-level even within central regions, in hinterland of middle-sized regional centres, concerning the long-distance road network and terrain barriers (Halás, 2008; Halás and Klapka, 2015; Plešivčák, Buček, 2017).

As it is described above in general terms, the periphery (hinterland) is understood as an area that is difficult to access in terms of transport, distant from economically developed large cities. Most often, these areas are characterized by low population density and lower level of development, as well as a low level of entrepreneurship, innovation, and development of infrastructure. Counteracting the peripherality understood in this way is based on the idea of building local central centres, stimulating the settlement network (Fig. 2) in order to stop the depopulation of rural areas.

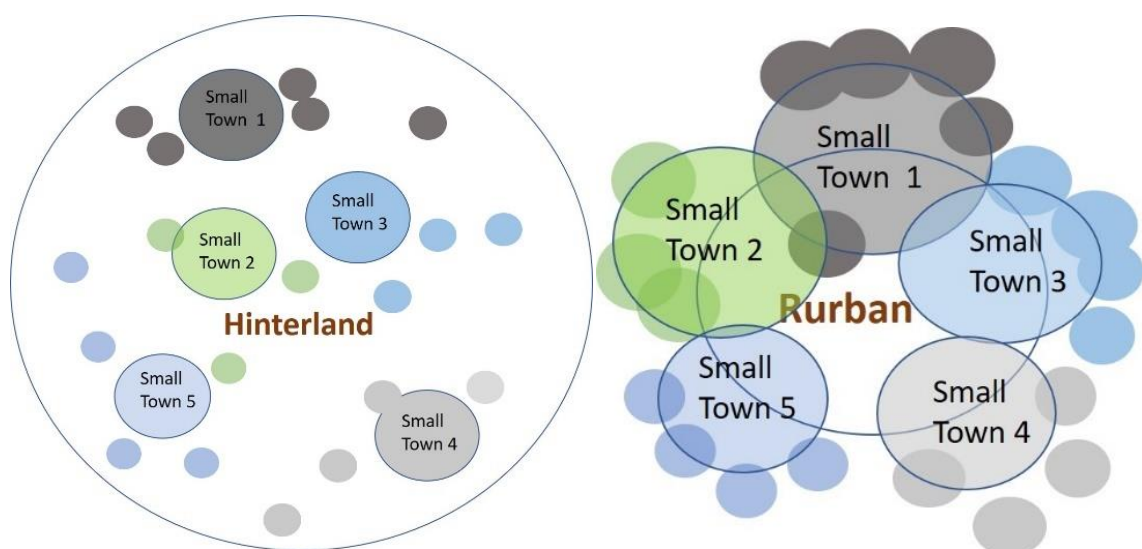


Fig 2. Relation between small towns and villages in hinterland region and rural area. Source: made by authors

These areas are usually characterized by a large dispersion of settlement units and the predominance of small towns and villages compared to agglomeration areas. Despite the aforementioned economic and demographic problems, however, the great potential of socio-cultural and spatial areas is perceived, e.g., relating to the quality of life of residents, pro-health issues, maintaining social ties, protection of traditions and heritage of peripheral regions.

2.4 Peculiarities of rural urban interface development

Going from country to country, different cases of the identification of specific problems in rural areas often seems to be neglected. This is because rural areas can face greater challenges in solving these problems or getting specific support. The situation of rural areas and their development is affected by various ongoing changes and challenges related to urban areas. Scientific research and practical reports (Rural..., 2010; Dax, 2014; Piorr et al., 2015; Rural..., 2016; Shrinking..., 2017) recognize traditional problems such as declining rural population, ageing population, poverty and social exclusion, rural to urban migration, social segregation, lack of qualified workers, difficult accessibility and availability of services, etc., and decide that attitudes towards rural areas themselves are also changing.

Rural shrinkage becomes a factor of a broader economic and labour market decline, peripheralization, and a deepening urban-rural divide – intensifying the inherent disadvantages of rural areas. Problems associated with ageing (European Commission, 2008; Rural..., 2010) are worsened by the isolation, distances to basic services such as health care, and weaker transport infrastructure that characterize some rural regions. These social determinants of local peoples' lives allow to assume that rural-urban interface can be crucial while enhancing rural people to live better and to find ways out of mismatches between rural problems and various choices in urban areas, a better adjustment of resources to needs. It also affects the interaction between rural and urban areas and their functioning, which is not only about an economic exchange, but also about socio-cultural, environmental ones.

Surchev (2010), Dax (2014) emphasized the very important fact that rural areas are not synonymous with agriculture because more economic activities are dominant and present rural areas not as merely 'dependent' on traditional agriculture approach. Their ideas were followed by others, that rural areas are solving their problems which depend on regional and local actors from various sectors.

The local residents are the main important subject in rural or regional development. This means that urbanisation process trends require increased attention for connectivity between urban and rural areas as more people can be involved in tackling various challenges (Rural..., 2016). Spaziant (2014) explored that the increase in urbanisation changes and fosters the nature of the relationship between rural and urban land uses what has deep consequences both for human quality of life and for the environment. Piorr et al. (2015) developed the mentioned idea that rural-urban interface is important because the surroundings of urban areas and the rural hinterland affect each other by different social structures, functions, and relations, which are important for the development of both territories. On the other hand, peri-urban areas suffer from urban pressure, but they also have mutual benefits from urban areas' markets, cultures, workplaces, innovations. Following him, social and cultural preferences can be a powerful driver for spatial segregation and social fragmentation with emphasis on technologies, such as online public services and shopping are changing the structure of local centres and the pattern of housing and settlements.

Concerning the sustainable development of the rural area, Bucur (2015) highlighted the need for social human activities and intra- and inter-community relations, and also he noted that the rural space is a social space where special connections exist between the community members and they cannot be neglected as sometimes is in urban areas.

The social life of the rural localities is deeply linked to the spiritual and cultural life, the traditions and customs being an undeniable patrimony of each rural region. This also should be a key direction in strengthening the rural-urban interface.

3. Research methodology

The research methodology is based on:

- comparison of typology for small towns, villages, and rural areas in selected countries,
- analysis of social and spatial problems,
- analysis of main functions concerning relations between small towns and villages and cities;
- analysis of contemporary trends and tendencies in social and spatial development,
- determining the possibilities of developing competitive directions of rural areas in relation to large agglomerations.

3.1 Methods

The research methodology is based on the following methods used in the research: analysis and synthesis of the literature, case studies in the selected countries, secondary data analysis, comparative methods, and visual data representation. Theoretical aspects enabled to explore different cases from the selected countries – Poland, Lithuania, and Slovakia. The authors shortly described the regions which were selected in each country, then there were 3 small towns in the region and 5 surrounded villages selected. Due to the differences in the definition of a small city, the authors adopted the criterion for selecting towns of up to 10,000 inhabitants. Taking into account this criterion, the choice of three cities was justified due to the possibility of comparing all three regions. The selection of the city and selected villages for research was made on the basis of functional and spatial relationships. It was important that the analysed settlements implement the projects and programs described later in the article.

Secondary data were used from all selected countries, including information about small towns and villages from internet sources, national and regional statistical data, and separate documents from the regional/local level. A comparative method was used to see similarities and differences of perception of what rural area/small town/village is as well as social and spatial relation between small town and village (Fig. 3).

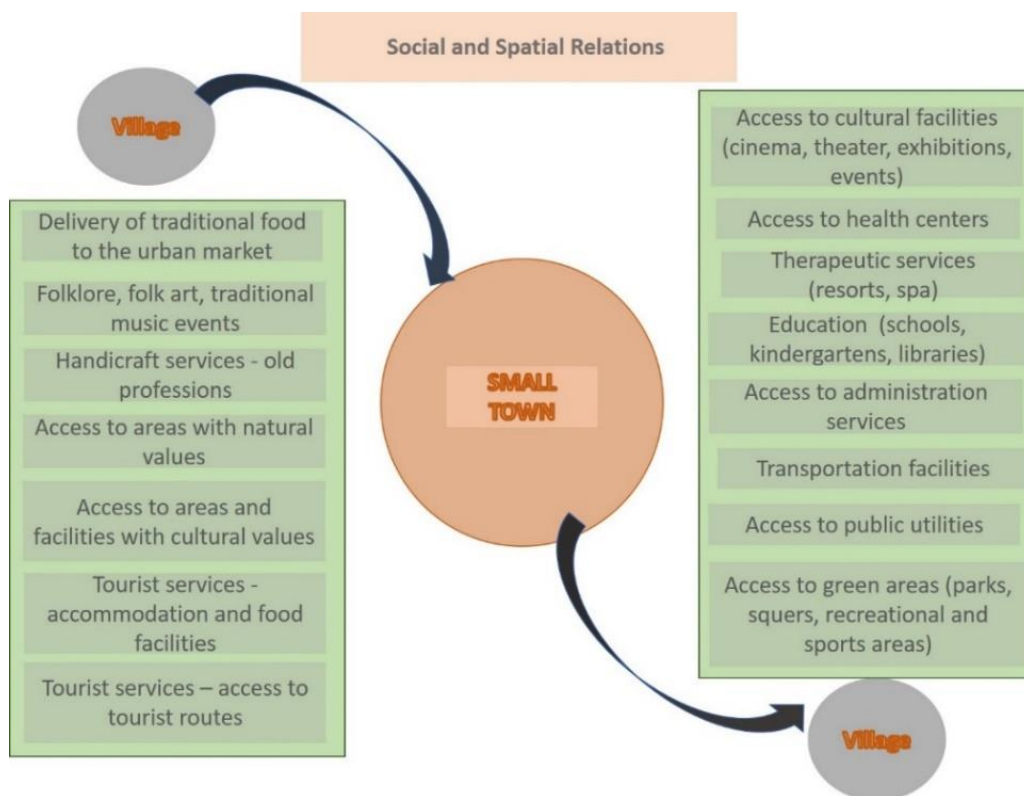


Fig 3. Social and Spatial Relation between Small Town and Village. Source: authors` elaboration based on Jaszczak (2015)

From among the functions that mutually affect space and social conditions in the small town – village relation (presented in Fig. 3), the five most important were selected, and then these functions were assessed in terms of importance. Additionally, an analysis of the impact of the most important functions of rural areas (small town + village) on the development of the region and large cities was performed. It was supplemented by the analysis of the most important spatial and social development programs of the analysed small towns and villages, covering a five years period from 2015 to 2020.

3.2 Study areas

Three European regions were selected for detailed analysis, differing in spatial, cultural, demographic, and economic terms, including Kaunas region (Lithuania), Warmia and Mazury (Poland), and Prešov region (Slovakia).

Kaunas region (Fig. 4.) is one of the ten regions in Lithuania. It is located in the centre of the country and its capital is Kaunas. Kaunas region is unevenly developed. There is an obvious gap between quantitative and/or qualitative development comparing social, economic, cultural, or other indicators that enhances the socio-spatial inequalities. Small towns and villages that are far from Kaunas city are less developed, have weak connections with Kaunas city, negative population changes are observed, which affect other life spheres as well. According to the Demographic Yearbook (2018) of Lithuania, the resident population at the beginning of 2018 was 563,112 in Kaunas region, 20 percent of the total resident population in Lithuania. Population density at the beginning of 2018 was 69.6 inhabitants per km². The area – 8,089 km² represent 12.4 percent of the area of Lithuania. Kaunas region municipalities with their small towns and villages (except Kaunas district municipality) are characterized by a declining population mostly affected by the phenomenon of migration. Peculiarities of population concentration disclose that Kaunas region belongs to the category of peri-urban regions. Kaunas city is located in the centre of the region and is the main urban, administrative, and economic centre of the region. Most of the region's higher education institutions, various organisations, and companies serving the region's population operate in Kaunas and half of Kaunas region's population live in Kaunas (Kauno..., 2015). On the other hand, it means that remoted or peripheral areas in the region do not have the same or equal progressive situation as Kaunas or Kaunas district municipality has according to several points: less communication with the city centre, unstable employment, not so good public services provided, leisure and recreation is limited due to specific factors in small towns and villages.

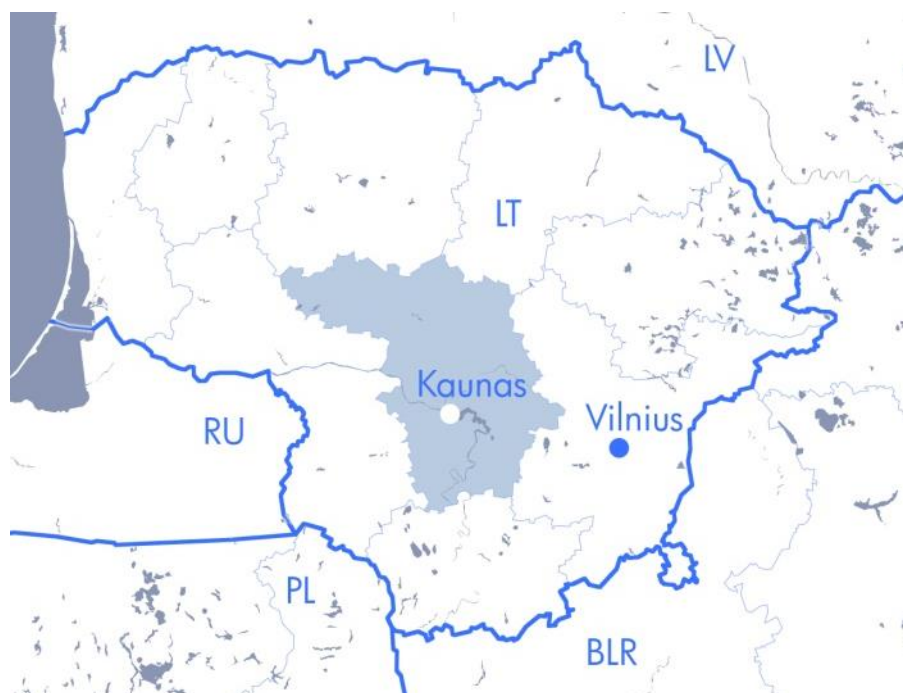


Fig 4. Location of Kaunas region (Lithuania). Source: authors based on Mapbox Studio

Warmia and Mazury region in Poland (Fig. 5).is located in the north-eastern part of Poland, on the Vistula Lagoon, close to Kaliningrad Oblast, constituting the eastern border of the European Union.



Fig 5. Location of Warmia and Mazury Region (Poland). Source: authors based on Mapbox Studio

About 1.5 million people live in the region. The capital of the region is Olsztyn, the largest city in the region. But in the whole of Poland, it is only in the 21st position in terms of the number of inhabitants. In terms of area (24,000 km²), the region is the fourth largest voivodeship in the country. The voivodeship is undoubtedly one of the most attractive regions of Poland in terms of tourism. It is also an interesting place for investors. Currently, the leading areas of the economy of the Warmian-Masurian Voivodeship include tourism, healthy food production, wood industry, pro-ecological forest management, yacht production, and ecotourism, production of machinery and equipment based on clean industrial technologies and renewable energy sources (BIP, 2016). In 2011-2017, the overall GDP per capita value in the voivodeship grew slightly slower than the national average. The share of its own income of Warmińsko-Mazurskie municipalities in the total income of municipalities in Poland decreased, and the region's share in the total population of the country decreased slightly. Changes in the population potential are illustrated by two trends: a decrease in the number of people in most municipalities, including cities, and an increase in the number of people mainly in municipalities surrounding cities (progressing suburbanization). The prospects until 2030 show that this trend will continue (Strategia rozwoju społeczno-gospodarczego, 2020). The region is part of the functional area "Green Lungs of Poland", and thus of the "Green Lungs of Europe", "Green Baltic Ring" and other areas created as a result of the concept of protection and management of the areas of north-eastern Poland, including the System of Protected Areas of the Warmian-Masurian Voivodeship, the National Ecological Network ECONET-Polska, Euroregion Niemen, Euroregion Baltic (Jaszczak, 2009). It is worth paying attention to the cultural heritage related to the history of Warmia and Mazury, but also to the multiculturalism after World War II.

Prešov Region in Slovakia (Fig. 6) is one of eight Slovak administrative regions and consists of 13 districts and 665 municipalities, from which 23 have a town status. It was established in 1996. It is located in north-eastern Slovakia and has an area of 8,973 km² (18.3% area of Slovakia). It borders Poland and Ukraine.

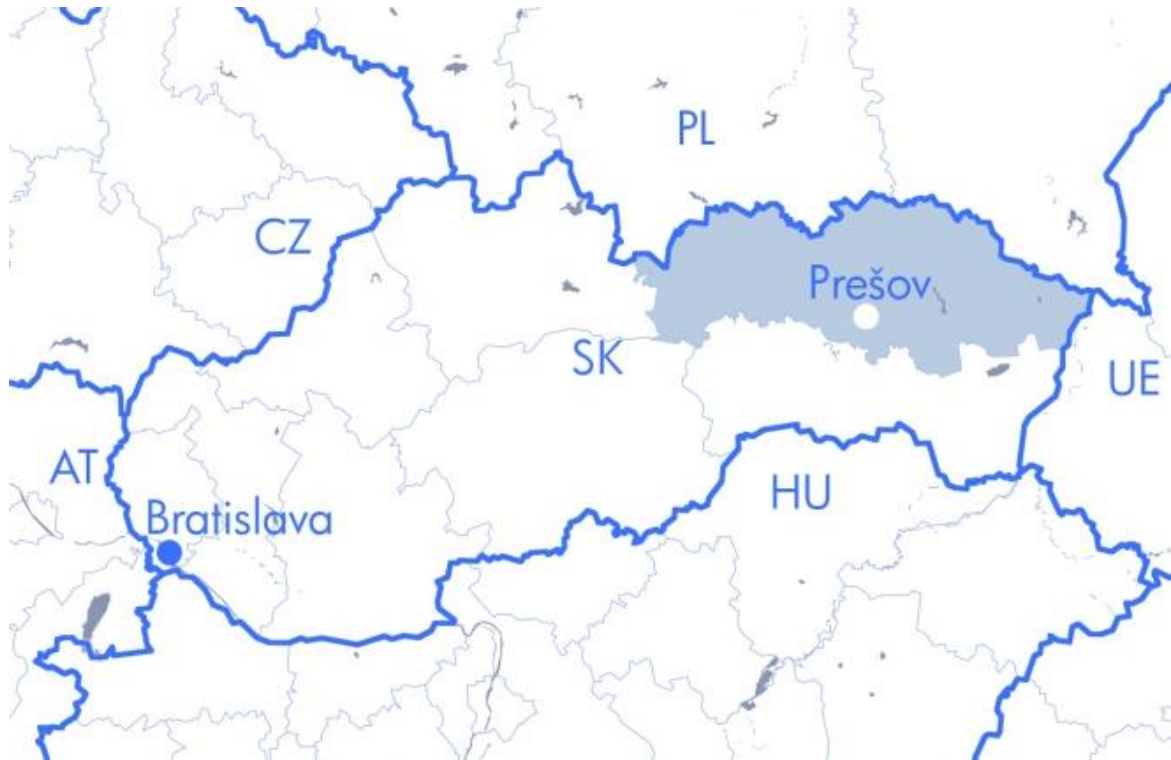


Fig 6. Prešov region in the map of Slovakia. Source: authors based on Mapbox Studio

According to the 2018 census, there were 825,022 inhabitants in the region (14.8% inhabitants of Slovakia) and the population density in the region is 92 inhabitants per km², which is below the country's average (110 per km²). The region has a predominantly mountainous landscape with specific local cultural and historical traditions and recreational potential. However, the region being so mountainous is also a disadvantage, especially from the point of view of international and national transport and communication links. Its administrative centre is the city of Prešov. The largest towns are Prešov, Poprad, Humenné, Bardejov, and Snina. The region is peripherally located in relation to Bratislava – the capital of Slovakia. Its geographical position and official statistical data about the performance of the regional economy – low GDP/capita and high rate of unemployment contribute to its generally presented image of the underdeveloped region in Slovakia (Székely, Novotný, 2019). The industry in the region is diverse without a significant focus on some manufacturing sectors. The metalworking, woodworking, food, electrical, engineering, chemical, textile, and clothing industries are concentrated mainly in district towns. Agricultural land occupies 41.7% of the total land area. Almost two-fifths of it is arable land, on which mainly cereals, fodder, oilseeds, and potatoes are grown. In the cultivation of potatoes, the region is one of the largest producers in the Slovak Republic. In animal production, cattle breeding predominates. Of the total land area, large areas of forest land are managed.

The short characteristics of the selected regions in Lithuania, Poland, and Slovakia, made it possible to do the deeper analysis based on the given research object and aim.

4. Results

4.1 Typology of rural areas, small towns and villages in Lithuania, Poland and Slovakia

The analysed regions are characterized by diversified spatial, social, and organizational conditions, which results in differences in defining rural areas, small towns, and villages. In the conducted research, these differences were referred to, paying attention to legal definitions (Table 1) and not recognized as formal but commonly used definitions.

In Lithuania, the relevance of small towns is characterized by their typology based on specific features recognized in The Law on Administrative Units of the Republic of Lithuania and Their Boundaries. According to it, residential areas are divided into urban (cities of various sizes) and rural (towns and villages) residential areas. The towns are compactly built-up residential areas, the population of which exceeds 3,000, and more than $\frac{2}{3}$ of all the working population of which are employed in industry, business and production, and social infrastructure. The towns of the Republic of Lithuania, the population of which is less than 3,000, regional towns and urban-type settlements which had the status of town, shall be considered as towns even after the coming into effect of the Law on the Territorial Administrative Units of the Republic of Lithuania and their Boundaries. Small towns are compactly built-up residential areas, the population of which is from 500 up to 3000, more than a half of the working population of which is employed in industry, business and production and social infrastructures, as well as traditional small towns. Villages are other residential areas having no characteristic features of a town and a small town. Following the Law on Agriculture, Food and Rural Development of the Republic of Lithuania (2008), the rural area was characterised as a residential area with a population not exceeding 6 thousand residents. This classification of settlements into towns and villages was made according to the size of the settlements and the employment structure. The most problematic is the classification of small towns up to 3 thousand that are close to towns in terms of population. The differences in the status of small towns, and towns (very similar in terms of population) in Lithuania were determined by different developments, traditions of economic activity, and way of life. The predominant rural housing policy encouraged the concentration of the rural population. In the area of small towns and towns, rural development centres were formed. Social infrastructure has been developed accordingly. With the restoration of independence and the beginning of the process of economic transformation, small towns, towns and large rural settlements became more similar. In small towns, the importance of industry has decreased, the dependence of the population on small-scale agriculture has increased, which used to be typical only for the residents of towns. Therefore, in the new socio-economic environment, the prospects of both small towns and towns as centres of development of rural areas should be assessed together.

The Polish legislator has not introduced a legal definition of a rural area. However, many legal acts use it while not defining its content, e.g. the Act of 20 February 2015 on supporting rural development with the participation of the European Agricultural Fund for Rural Development under the Rural Development Program for 2014–2020, at the sub-statutory level the Regulation of the Prime Minister of 18 March 2009 on the national rural network, or the Regulation of the Minister of Agriculture and Rural Development of 12 October 2015 on funds available in individual provinces under specific actions, or sub-measures of the Rural Development Program for 2014–2020 (Krzysztofik, 2017). According to the Central Statistical Office, which characterizes rural areas based on territorial division of the state according to the National Official Register of Territorial Division (Krzysztofik, 2017 after Giemza, 2015), rural areas are located outside the administrative borders of cities, or more precisely – rural municipalities and rural areas of urban-rural municipalities. This approach is related to the administrative division of Poland and three types of municipalities: rural (which consist only of villages), urban (whose territory is occupied by the town), and urban-rural (those with at least one town in their territory). However, based on administrative criteria alone, rural areas cannot be clearly defined. Therefore, rural areas in Poland include both, the urban areas of development and infrastructure, where non-agricultural economic activity is carried out, and areas with scattered development, completely subordinated to agricultural activity (Wilkin, 2013; Krzysztofik, 2017). According to Polish Law, a village is a settlement unit with dense, or dispersed development and existing agricultural or

related services, or tourist functions, without municipal rights or the status of a town (Dz.U.2019.1443 t.j. Art. 2). As a description of a town in Poland, the following legal definition is adopted. It is a settlement unit with a predominance of compact development and non-agricultural functions, having municipal rights, or the status of a town granted according to regulations. However, the main criterion for dividing towns into size categories is the number of their inhabitants. Comparing basic categories, it means the division of towns into small (up to 20 thousand inhabitants), medium (20–100 thousand), and large (over 100 thousand).

In Slovakia, according to Article 64 of the Constitution, territorial self-administration is composed of municipalities and higher territorial units. According to the Act 221/1996 Coll. on Territorial and Administrative Division of the Slovak Republic, regions are broken down into districts. The territory is divided into 8 regions, 79 districts, and 2,890 municipalities (Regional Statistical Yearbook of Slovakia, 2019). The legal status of municipalities is enacted in Act no. 369/1990 Coll. on Municipal Establishment (last amended in 2019). According to this Act, the statute of a town can be granted by the National Council of the Slovak Republic on a proposal by the Government to municipalities which are: economic, administrative, and cultural centres, tourism or spa centres, provide services for the residents of surrounding municipalities, have transport connections with the surrounding municipalities, at least a part of their built-up area has an urban character, and have at least 5,000 inhabitants. The number of inhabitants is not a strictly determining condition. A municipality can be declared a town even if it does not fulfil the condition of the number of inhabitants if it meets the other criteria. Rural municipalities were first categorized in Slovakia officially as rural in the population census of 1961 and were assigned the category of "a rural village" (Novotný et al., 2016; Nestorová-Dická et al., 2019). This categorization of municipalities as rural and non-rural remained in use until 1991 when it was excluded from the definition of municipalities. Today, the Slovak legislation recognizes only towns as specific types of municipalities, the rest of municipalities are not recognized in a special sense, even most of them have a rural character. As stated by Nestorová-Dická et al. (2019), the identification of rural/non-rural/urban areas is a complex task and due to the ongoing process of extensive transformation of the countryside in the last decades, it becomes even more difficult. Nestorová-Dická et al. (2019) tried to delimit rural and non-rural municipalities based on the rurality index and found the north-eastern and southern parts of Slovakia as the most rural areas.

Definitions of territorial units in legal documents of examined countries are presented in Table 1.

Tab 1. Definitions of territorial units in legal documents (made by authors).

	Document	Town	Rural area	Small Town	Village
LT	<p>¹The Law on Administrative Units of the Republic of Lithuania and Their Boundaries (1994)</p> <p>²Agriculture, Food And Rural Development Law of 2002 June 25 No. IX-987, Vilnius</p>	<p>Compact built-up areas with more than 3 thousand inhabitants, more than 2/3 of whom work in the industry, business, and industrial and social infrastructure. The status of a town was also reserved for towns with less than 3 thousand inhabitants, district centres and urban-type settlements, which had the status of a town at the time of the entry into force of the law.</p>	<p>Residential area with a population not exceeding 6 thousand</p>	<p>Compact built-up areas with a population of between 500 and 3,000, more than half of whom work in industry, business, industrial and social infrastructure, as well as traditional towns.</p>	<p>Residential areas without town features</p>

	Document	Town	Rural area	Small Town	Village
PL	Dz.U.2019.1443 t. j. Art. 2. – The Act of August 29, 2003 on official names of places and physiographic objects	Settlement unit with compact construction and non-agricultural functions having city rights, or city status granted in the manner specified in the regulations. According to the act, in order for a town to receive city rights, it must have more than 2,000 people registered, have urban (non-farm) buildings and at least 2/3 of the population must be employed outside agriculture.	There is no official definition	Compact built-up areas with a population up to 20 thousand inhabitants	Settlement unit with compact, concentrated or dispersed buildings and existing agricultural functions or related services or tourist facilities, without municipal rights or town status
SK	Act No. 369/1990 on Municipal Establishment of the National Council of the Slovak Republic (last amended in 2019)	A settlement unit that fulfils the following criteria: <ul style="list-style-type: none"> - is an economic, administrative, cultural centre, or a tourism and spa centre, -is providing services for residents of surrounding municipalities, - has transport connections with the surrounding villages, - at least a part of its built-up area has an urban character - has at least 5000 inhabitants <p>The number of inhabitants is not a strictly determining condition. A municipality can be declared a town, if it meets the rest of the criteria.</p>	There is no official definition	Settlement units fulfilling the criteria and declared a city, with a population of up to 20 thousand inhabitants	Settlement unit without town status, with a compact, concentrated or dispersed building structure, usually with prevailing agricultural functions or related services or tourist facilities. The number of inhabitants is not a strictly determining factor (there are villages with a population exceeding those of several small towns).

As highlighted above, the legal and strategic documents of the countries define residential areas differently. Rural settlements include small towns and villages, but definitions depend on the legal document, the size of the country, the historical development of the country and settlements, and the traditions of public administration.

According to the Demographic Yearbook (2018) of Lithuania, there were 103 towns, 21,007 rural settlements, 67 percent of urban and 33 percent rural population (1/3) in Lithuania.

The current settlement network of Poland consists of 944 towns (Regulation of the Council of Ministers, as of 2020) and brings together almost 2/3 of the country's population. It has a basic role in the process of economic development of the country, satisfying many life needs of the population. The largest cities have the greatest importance in this grid, but almost half of

the urban population lives in medium-sized towns (20,000–100,000 inhabitants) and small towns (up to 20,000). The smallest town (up to 10,000 inhabitants) are in the total number of 542.

Slovakia is still one of the less urbanized countries in Europe, with a share of the population living in cities of approximately 53 percent in 2019 and those living in rural – village settlements of approximately 47 percent. The current settlement network in Slovakia is created by 2,890 municipalities, and 141 of them are towns. The most recent municipality declared town is a former village Nesvady (from January 2020; 5,049 inhabitants). Only 38 towns have a population of over 20,000 inhabitants. Remaining 103 towns fall into the category of small towns. Within this category, 69 settlements are towns with fewer than 10,000 inhabitants (Table 2).

Tab 2. Number of administration units (towns and villages).

Country	Number of Towns (total)	Number of small towns up to 10 thousand inhabitants	Number of villages
Lithuania	103 ¹	71 ¹	21007 ¹
Poland	944 ²	542 ²	43082 ²
Slovakia	141 ³	69 ³	2749 ³

¹ Demographic Yearbook 2017 (2018): <https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420>

² Statistical Yearbook of Poland (2020): <https://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/maly-rocznik-statystyczny-polski-2020,1,22.html>

³ Statistical Office of the Slovak Republic, <https://slovak.statistics.sk>

In the analysed countries, there are differences in terms of criteria and methods of determining size groups of towns. For example, the only recognized criterion of urbanity in Poland is having town rights, the population size determines a specific size group (Runge, 2012). In Lithuania, the main criterion for the classification of territory as an urban or rural is the number of inhabitants and the town status.

Lithuanian towns are characterized by the development of large suburbanization zones and internal structural transformation by adapting to market economy conditions, lifestyle changes, and new quality of life. The network of Lithuanian towns is territorially balanced and relatively stable, and villages, especially away from district centres, are disappearing. From a hierarchical point of view, Lithuania is characterized by the gap between the two largest cities and the abundance of other medium-sized and small towns. At the beginning of the 20th century, the network underwent functional, structural, and hierarchical transformations; the uniformity of the distribution according to the rank and size increases, the number of the smallest towns decreases. Structural change of urban areas is taking place, and municipalities with a town status are sometimes merged with neighbouring areas and settlements. There are no large agglomerations in Lithuania, but due to the development of suburban areas, monocentric agglomerations of settlements are formed on the basis of large cities. In the largest cities of Lithuania, the population density is 2,000–4,400 people/km², in the medium towns 1,800 people/km². The lowest density in the areas with a town status is up to 100 people/km².

In Poland, the asymmetry of distribution of the population means that the group of small towns includes over 600 centres. There are 180 medium-sized towns and about 40 large towns. The first group reaches a maximum of 20 thousand, the second 80 thousand, and the third exceeds 1 million inhabitants. (Runge, 2012 after Szymańska 2007). In the set of small towns (over 600), subclasses are distinguished, with a population of 5–10 thousand, 10–20 thousand, and settlements with less than 5 thousand inhabitants, which formally, according to their legal status, are small towns, but are located on the border of urban areas, often constituting rural and urban forms (Runge, 2012). Referring to the function, as a criterion for categorizing cities in Poland, small towns are most often local centres of agricultural service. However, the situation becomes more complicated in complex settlement systems, where the population size and functional criteria raise numerous doubts. The importance of cities of a certain size may vary depending on their location, as it affects the level of centrality and specialization of the town. We also find regions in Poland with a strong demographic potential of the capital city (Runge, 2012), where, due to

the small share of medium-sized towns, numerous small towns play the role of an intermediate link in the regional settlement system (Podlaskie, Warmińsko-Mazurskie Voivodeships).

In Slovakia, the settlement structure resulting from historical and geomorphological conditions is in a relatively stable polycentric spatial system. Municipalities are declared towns without meeting the strict size criterion of 5,000 inhabitants, due to historical development, since in the past, they were granted town rights. The rapid urbanization in Slovakia took place after the Second World War and was related to the post-war renewal and industrialization of the country. This process concentrated jobs and infrastructure to the selected urban-type settlements and implemented the concept of so-called “central villages” in the sixties and nineties of the 20th century. These villages were the target of investments and provided civic amenities for their catchment area. The political and economic transformation after 1989 also influenced the economic, social and spatial structure of towns. The process of residential and commercial suburbanization was activated, fuelled by rising real estate prices in built-up areas and characterized by a decline in the population of nuclear cities, with a continuing concentration of population in urban functional areas and agglomerations. The process of urbanization continues as a process of transformation of the rural population to urban, especially by the nature of life. However, in towns located mainly in the least developed regions of Slovakia, especially in the south of central Slovakia and the north of eastern Slovakia, there are opposite phenomena of urban shrinkage and depopulation of settlements, due to lack of job opportunities and difficult access, although these areas often have a valuable natural and cultural heritage. Policies and various development programmes aim to prevent this unfavourable trend and support the functional network of small towns and rural settlements, based on the principles of sustainable development, taking in account economic, social, environmental, and cultural objectives.

4.2 Comparison of spatial and social relation between towns and villages in selected regions of Lithuania (LT), Poland (PL) and Slovakia (SK)

For the comparison and analysis of spatial and social relation between towns and villages, the sets of three small towns (up to 10 thousand inhabitants) and five villages were selected (Table 3).

Tab 3. Selected units of small towns and villages in selected regions (made by authors).

Country	Small Towns (3 selected, up to 10 thousand inhabitants)	Surrounded Villages (5 selected)
LT	Birštonas	Nemajūnai, Dimšiškės, Geležūnai, Naudžiūnai, Škévonys
	Prienai	Stakliškės, Veiveriai, Jieznas, Balbieriškis, Išlaužas
	Raseiniai	Nemakščiai, Šiluva, Viduklė, Girkalnis, Kalnujai
PL	Biskupiec	Biesowo, Kobyłty, Czerwonka, Węgój, Rasząg
	Dobre Miasto	Cerkiewnik, Głotowo, Prasłity, Smolajny, Orzechowo
	Orneta	Chwałęcín, Krosno, Henrykowo, Osetnik, Karkajmy
SK	Hanušovce nad Topľou	Petrovce, Ďurdoš, Prosačov, Remeniny, Vlača
	Giraltovce	Lužany pri Topli, Železník, Mičakovce, Matovce, Kalnište
	Lipany	Krivany, Ďačov, Dubovica, Rožkovany, Lúčka

Analysis of spatial relationships between the examined small towns and the centres, main towns of the regions and the largest city (capital) of the country, with the main administrative, economic, and diversified spatial as well as social functions. Slovak small towns in the Prešov region are farthest from the capital city, more than twice than Lithuanian towns, but comparing the distance of the small towns from the largest city in the region, the situation is the opposite, Slovak small towns are closest to the centre of the region, followed by Polish and Lithuanian ones. The differences are found also in the distances between small towns and villages (Fig. 7).

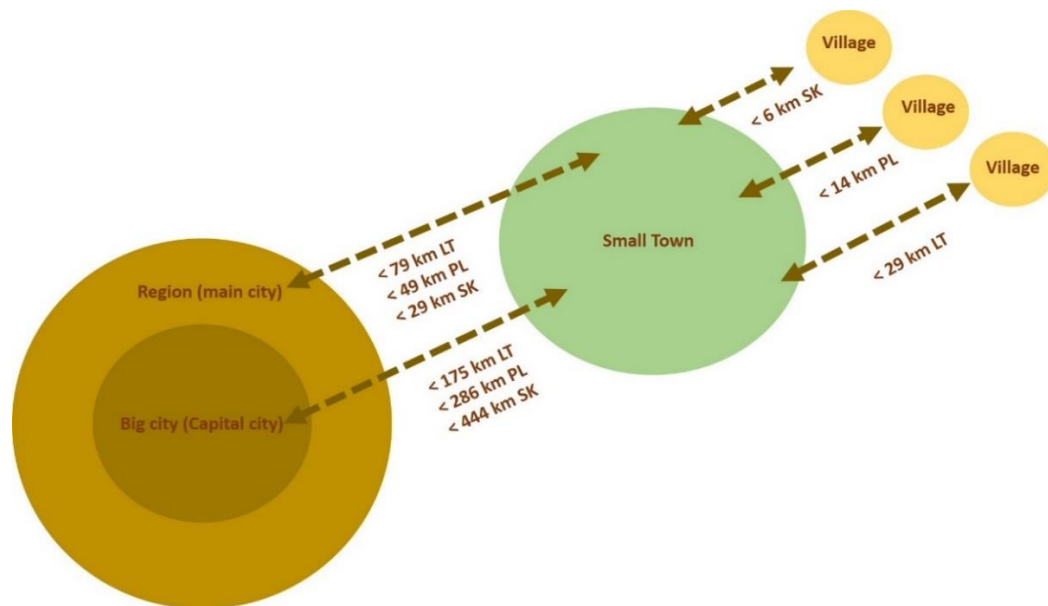


Fig 7. Distance between big city, region, small towns and villages in selected areas (LT, PL, SK). Source: authors

When comparing the distances between small towns and villages, the shortest distances are recorded in the case of Slovak villages. Six villages are within 5 km and three up to 10 km from a small town. In the case of villages from the Warmia and Mazury region (Poland), four villages have the shortest distance to a small town – up to 5 km, six villages from 5 to 10 km, and five from 10 to 15 km. In the Kaunas Region, villages are located farthest from the small towns. Only one village is within 5 km, three from 5 to 10 km, six from 10 to 15 km, one from 15 to 20 km, and four over 20 km.

The analysis of functional and social relations (Table 4 or Fig 7.) shows that in all three regions the examined small towns are also important administrative centres for villages. This is the most important function for residents, which is related primarily to access to broadly understood administrative services. In Prešov region, the centres of district administration are small towns with a population exceeding 10,000 inhabitants (except Medzilaborce), but the small towns with a population of up to 10,000 still provide important administrative functions (e.g. post office, police). The educational function is the second important function. In the case of small towns in Warmia and Mazury (Poland), it is based on enabling access for students from village to the second level of education (secondary schools), and a lesser extent to the first level (primary schools and kindergartens), as however, a change is likely to take place here as well, as in recent years, there has been a tendency to close primary schools and kindergartens in rural areas. In the Kaunas Region and Prešov Region, a small town often offers access to all levels of education from kindergartens, primary, and secondary education, when there are no education centres in the villages. Small towns in all analysed regions offer out-of-school forms of education, e.g. arts education, vocational courses, and training. Another function of small towns in terms of services for rural residents is the health function. In small towns, there are hospitals, health centres, or spas. The availability of such services is extremely important, especially for the elderly, and as the population aging trend is noticed in the analysed regions. Rural residents use also larger stores, supermarkets with a diverse range of products in small towns, not available in small shops and rural outlets. No less important than the others is the cultural function which a small town provides to rural residents. In the analysed small towns, there are cinemas, theatres, associations and cultural organizations, or libraries. Due to the long distance to large centres, the cultural offer of a small town is often the only possibility of contact with culture for rural residents.

On the other hand, the analysed villages in all three regions are, for a small town, an important source of agricultural production, especially ecological production based on local resources from small farms (as opposed to intensive agriculture). These products are delivered directly to customers in small towns (sales on markets, fairs, food outlets) and to local restaurants and catering services. In Kaunas Region and in Warmia and Mazury, the second function provided by

villages to small towns is small services, in the case of Lithuanian they are rather related to handicrafts (handicrafts in Polish villages are classified in fourth place), and in Poland, these are car repair shops or carpentries. In the Prešov region, services and small business are often connected to logging, and wood processing. However, another form that is important for the development of small towns under the influence of the surrounding villages is the folklore, traditions, and cultural activities of numerous local organizations. This is the case in all three regions. The Polish and Lithuanian villages also provide opportunities for local tourism for residents of small towns, mostly seasonal, as well as short-term. In Prešov region, local tourism is more significant, especially in mountainous areas, offering hiking trails and sport opportunities (Table 4).

When analyzing the role of rural areas, including the small town-village relationship in the development of regions, it should be stated that in all three regions the main function is food and bio-raw materials production. Production is adapted to the needs of the regions, however, in recent years, the ecological trend has prevailed. The second direction is tourism based on natural and cultural heritage and resources, as well as small-scale activities. This especially applies to the preparation of tourist routes, regional events, and a folklore program based on the work of folk artists. The tourist offer is also an element of regional education for residents about the heritage of rural areas and these two functions are connected in a way. In addition, as in the case of Prešov region, rural areas offer sport opportunities. Small towns and villages are venues for regional exhibitions of various themes and specifications. The non-agricultural functions of rural areas, development of tourism and recreation are connected with ecology and green infrastructure solutions. Although this tendency seems to be visible in all analysed regions only for a few years, it will undoubtedly develop in the future (Table 4). The last analysis concerned the functions of rural areas provided for large cities and industrial centres. Of course, the most important is the production and processing of food, both from intensive and extensive as well as ecological agriculture. The supply of raw materials is also of great importance, especially from the Lithuanian and Slovak regions (first in terms of importance in the analysis), but also from Warmia and Mazury, Poland (Table 4). All three regions are important areas with a rich tourist offer. It is based on small-scale tourism products (e.g. rural tourism), which, as previously indicated, are used, apart from the inhabitants of large cities, also by inhabitants of particular regions and small towns, and on large-scale products (large hotels and motels, tourist centres) aimed at a larger group of tourists, mainly from large cities and abroad. Another function is related to environmental protection as well as pro-health services. Due to relatively low pollution and the lack of large industrial centres, the analysed rural areas were characterized as "green lungs", which is important in the country and large cities. Rural areas also provide excellent housing facilities, especially as locations for so-called second homes. It is especially noticeable in Prešov region (Slovakia) and Warmia and Mazury (Poland). In Lithuania, the distribution of food to large cities is of significant importance (Table 4).

Tab 4. Relations between a small town and villages in selected regions – analysis of the main functions (up to main 5, rated for importance, from 1-most to 5 least), ST-small town, V-village, RA-rural areas. Source: authors

	ST>V	V>ST	V&ST>RA	RA(ST+V)>big cities/agglomeration
LT	<ol style="list-style-type: none"> 1. Administration centre (municipality) 2. Education and schools – kindergartens, secondary schools, extra-curricular activities 3. Health services - hospitals, health centres, sanatorium and hotel services 4. Cultural centre, library 5. Commerce and services - larger stores, convenience stores. 	<ol style="list-style-type: none"> 1. Small scale agricultural production - products for the small-town market (eco, natural agricultural products) 2. Small businesses, handicrafts and daily necessities 3. Local community organisations initiatives, projects 4. Folklore and cultural events related to the village 5. Local tourism - one-day services, unorganized tourism 	<ol style="list-style-type: none"> 1. Production of bio-raw materials and food (mainly from villages) 2. Regional heritage, historical and religion events in rural areas 3. Regional and international tourism - accommodation, food, monuments, health service, tourist routes (Camino Lituano) 4. Place of trade fairs: agricultural and food products, handicrafts 5. Green infrastructure – green solutions and ecology, bike roads 	<ol style="list-style-type: none"> 1. Supply of raw materials e.g. wood, agriculture industry 2. Different forms of tourism (regional tourism products, educational programs) for residents of large cities 3. „ Green Lungs of the country” - environmental protection and health-promoting importance 4. Real estate market - the so-called second homes, summer houses 5. Primary food production and delivery of processed food to large cities
PL	<ol style="list-style-type: none"> 1. Administration centre (municipality) 2. Education and schools - secondary schools 3. Health services - hospitals, health centres 4. Commerce and services - larger stores, convenience stores, 5. Culture-cinema, theatre, cultural centre, library 	<ol style="list-style-type: none"> 1. Small scale agricultural production - products for the small-town market (eco products) 2. Carpentry services, car workshops 3. Folklore and cultural events related to the village. 4. Crafts and handicrafts-local workshops 5. Local tourism - one-day services 	<ol style="list-style-type: none"> 1. Food production (mainly from villages) 2. Regional tourism - accommodation, food, monuments, tourist routes 3. Regional heritage, historical and religion events in rural areas 4. Place of trade fairs e.g. agricultural and related to food production 5. Green infrastructure – green solutions and ecology 	<ol style="list-style-type: none"> 1. Food production and delivery of processed food to large cities 2. Different forms of tourism (regional tourism products) for residents of large cities 3. Supply of raw materials e.g. wood, furniture industry 4. „ Green Lungs of the country”- environmental protection and health-promoting importance 5. Real estate market – the so-called second homes, summer houses
SK	<ol style="list-style-type: none"> 1. Administration centre (municipality) 2. Education amenities – kindergartens, primary schools, secondary schools, extra-curricular activities (art schools) 3. Health services – health centres, hospitals, 4. Cultural centres, libraries, art galleries, 5. Commercial services – larger stores, hotels services 	<ol style="list-style-type: none"> 1. Small scale agricultural production for the small-town markets 2. Local tourism – accommodation services 3. Small businesses, 4. Local community organizations, initiatives, projects, cultural events related to the village 5. Sport events related to the village 	<ol style="list-style-type: none"> 1. Food production and bio-raw materials production 2. Regional cultural and natural heritage for tourism development (tourist routes) 3. Natural environment, green infrastructure for recreation and sport 4. Tourism services - accommodation, food, 5. Place of local trade fairs, cultural and sport events 	<ol style="list-style-type: none"> 1. Agricultural production, food production, supply of raw materials e.g. wood, industry 2. Different forms of tourism and tourism products 3. Environmental importance of Nature protected areas and green infrastructure 4. Second homes, summer houses.

4.3 Social and spatial linkage between small towns and villages in selected regions. New trends and programs

In Lithuania, various programmes implemented at the regional/local level by local action groups (LAGs) are based on support from the EU. Most of them focus on enhancing socio-economic rural development ensuring sustainability principles and networking, to create new social and environmentally friendly spaces and promote socio-cultural collaboration of local people and regional cohesion. It is widely recognized that the active role of various local actors in implementing different programmes becomes more and more important in creating modern, attractive and innovative living areas, safe and healthy environments at local level. In Kaunas region, different small towns have beautified its environment in recent years, strengthening the social activity of small towns and the ability to attract investment and tourists (Table 5).

In recent years, several programmes and projects have been implemented in Warmia and Mazury, including investments with a significant share of EU funding. In addition to standard forms of investing in agriculture, infrastructure, including communication and enterprise development in rural areas, a great emphasis is placed on the renewal and revitalization of space, as well as the activation of the community of small towns and villages. For example, under the Rural Development Program 2014–2020, investments are important in maintaining the identity of residents from peripheral areas. The activities are based on the spatial development of villages, the protection of monuments, modernization of facilities with cultural functions, shaping public spaces, and investments in marketplaces intended for local products. Local development is supported under the LEADER initiative, including implementation of local development strategies, cooperation projects, and functioning of local action groups. A very important role in Warmia and Mazury is played by the activities of 23 small towns gathered in the international network of Cittaslow towns, and in the Cittaslow Polska Organization. As part of the revitalization program, 19 of them carry out activities aiming at the renewal of urban space and the activation of residents. A similar program, but focused on the countryside, is the Rural Renewal Program (Table 5).

The Slovak Republic is significantly dependent on EU financial resources for public sector investment. Small towns in Slovakia use the support of the European Regional Development Fund within individual operational programs, e.g. Integrated Regional Operational Program, through which integrated territorial investments are implemented, focused on e.g. safe and ecological transport in the regions, improving the quality of life in the regions with an emphasis on the environment, improving drinking water supply, wastewater treatment, sewerage, recycling waste, building elements of green infrastructure, or adapting the urban environment to climate change. Slovak local governments are interested also in the Smart City concepts. The rural development programmes also support the construction of broadband internet in rural areas which are defined as white spaces in terms of coverage. Through the Human Resources Operational Programme, small towns support an increase in the employment of young, disabled, or older people. However, trends in the application of “slow” concepts for the sustainable development of small towns, villages, and rural areas cannot yet be observed in Slovakia. The programmes mostly used for implementation of the projects in Prešov region are shown in Table 5.

Tab 5. Selected programmes and projects for the social and spatial development of rural areas in analysed regions.

Country (region)	Selected programs (from 2014 to 2020)	Description
LT (Kaunas region)	Territorial cooperation project "Dzūkija Mound Road" ⁵	The aim of the territorial project "Dzūkija Mound Road", implemented by Trakai Region LAG, and the partners are Alytus District LAG, Prienai District LAG, and the Association of Dzūkija Rural Development Partners (Dzūkija LAG), is to create new spaces. The objective is the development of an active society, education, health, preservation of cultural traditions, development of modern tourism infrastructure.
	LEADER – I want to be visible	The project aims to increase the capacity of participants in the rural development process and to ensure sustainable networking. Tasks: to ensure the dissemination of information in the process of rural development; to increase the competence of the participants of rural development processes in the field of information technologies by publicizing LEADER.
	Kaunas district 2016–2022 local development strategy, Kaunas district LAG	The aim is to have a vision of the Kaunas District until 2023, as attractive for business, tourism, and innovations, healthy, constantly learning, and safe. The mission of the LAG is to improve the living environment, promote entrepreneurship by developing partnerships, strengthening community activities, and supporting local initiatives and innovations.
PL (Warmia and Mazury region)	Cittaslow Organization	Towns that apply for membership in the association undertake to meet the qualification criteria, which include: preserving the identity of the place, caring about historical buildings, creating people-friendly places, promoting local businesses and local products, development of sustainable tourism, landscape protection activities of the authorities and communities (Jaszczak, 2015; Jaszczak et al., 2019). The small towns of Cittaslow cooperate with the villages, among others, in the field of organization and distribution of organic food production, promotion of heritage, development of tourism.
	Program of town revitalization	The following issues were determined for the operational objectives of the revitalization programme in terms of improving the quality of public space: improving the quality of the environment, improving environmental awareness and pro-ecological attitudes of residents, promoting unique natural and cultural values (Supra-local Revitalisation Programmes of Cittaslow 2015, 2019). The purpose of the programme is a parallel, coordinated revitalization of the towns included in the network in Warmia and Mazury so that, while maintaining their unique character and values, they can at the same time offer residents a similar quality of life.
	Village renewal/Thematic villages	In Poland, the village renewal program was initiated in 1997 (Wilczyński, 2008; Wolski, 2017). It was implemented in the Warmińsko-Mazurskie Voivodship in 2011 (Wieś Warmii, Mazur i Powiśla..., 2011). The main goal is to increase the activity and integration of rural communities. It supports the activities of residents and practical implementation of rural renewal plans, including the co-creation of public space. The program also initiated the creation of the theme villages.
SK (Prešov Region)	Village Renewal Programme	Programme focused on the balanced territorial development of the rural economy and communities, on restoring the potential of agricultural production, supporting young farmers, small farms and businesses, providing basic services and regenerating villages in rural areas. Also using the LEADER approach.
	IROP Integrated Regional Operational Programme	The main goal of the Integrated Regional Operational Program (IROP) is to increase the availability and quality of civic infrastructure and facilities in the regions. In the period 2014–2020 in Prešov Region, it was used mainly for projects of modernization of roads and sustainable mobility.
	INTERREG SK-PL	Programme for the support of cross-border collaboration between municipalities in Slovakia and Poland. In the period 2014–2020 in Prešov Region, it was used for the implementation of various projects enhancing mutual relations in culture, tourism, mobility, nature and cultural heritage protection.

⁵ Electronic publication of the local action group cooperation project "Dzūkija mound road": <http://alytausrvvg.lt/wp-content/uploads/2020/07/Dzuku-naujausias.pdf>

5. Conclusion and discussion

The analyses carried out as part of comparative studies of three regions in Lithuania, Poland and Slovakia showed a close relationship between a small town and a village, and the mutual influence on their spatial and social development. Despite the differences in terms of area, number of inhabitants, as well as economic, social, and administrative settings, in individual countries, the analysed rural peripheral areas are characterized by many similarities, especially in terms of key development and economic problems, accessibility of infrastructure and transport, demographic and spatial changes. These similarities are not unique on a European scale, which is highlighted in the research by other authors (Dax, 2014; Piorr et al., 2015; Shrinking..., 2017).

The research results indicate significant differences in the perception of towns, small towns, and villages, as well as their legal definition. In Lithuanian law, a city includes a unit of more than three thousand inhabitants, while in Polish law, over two thousand, and in Slovak it is as many as five thousand. However, in Lithuania, the status of a city was also reserved for towns with less than 3 thousand inhabitants, district centres, and city-type settlements, which had the status of a city at the time of the entry into force of the law. The criterion of the number of inhabitants in Slovakia is treated similarly, as a city may have fewer inhabitants if it meets the other criteria. However, when it comes to the other criteria, in all three countries the existence of urban and non-agricultural functions is understood in the same way, as well as issues related to the building structure, which is to be of an urban-type. Only in Lithuania, they have rural areas that have been clearly defined in legal terms. Both in Poland and Slovakia, there is no official definition, but the meaning is commonly used but not established in law. When it comes to the issue of small towns, legally in Lithuania, these are administrative units with a population of between 500 and 3,000, more than half of whom work in the industry, business, and industrial and social infrastructure. However, similar conditions are in Poland and Slovakia, where the number of inhabitants is up to 20,000. Comparing the definition of villages, in Lithuania, it is a structure without urban functions and town features, while in Poland and Slovakia, these are administrative units with a compact or dispersed structure with an agricultural or tourist function, without the status of a city, while in Slovakia the criterion of the number of inhabitants is not obligatory. There is a similar situation in comparing other countries as they differ to mentioned aspects (Surchev, 2010; Bucur, 2015).

Results of research on spatial and functional conditions in selected regions showed a difference in the location of rural peripheral areas in relation to the central administrative centre, with small towns in the Slovak Prešov region being the farthest from the capital. However, if we compare the spatial relations between the main regional centre and the analysed small towns and between small towns, the situation is the opposite. Referring to the functions and relations between a small town and a village in all three regions, small towns are important administrative, cultural, and service centres for villages, while villages complement the production, cultural and social potential and play the role of maintaining local and regional heritage and traditions. Similar conditions were presented in the research by Vaishar and Zapletalová (2009), Vaishar et al. (2016), Agergaard et al. (2019), Csurgó and Megyesi (2016), Filipović et al. (2016).

The conducted research also shows that the development of socio-spatial relations is helped by the solutions introduced by activities in the field of renewal and revitalization of rural areas. These solutions are implemented through several programmes and projects financed or co-financed, among others, by the EU. The development of small towns and villages in all three countries, due to their peripheral location, specific spatial and social conditions, often depends on the involvement of authorities, local leaders, but also the inhabitants themselves. The programs and projects for rural areas in selected regions aim to increase the cooperation between local action groups and other participants in the regional development processes; to activate the sector of community business, social business, and other NGOs engaged in economic activities to ensure the goals of the possible progress and sustainable development based on the dialogue between local government, businesses, and communities. Strategies seek to contribute to fostering the regional and local identity, ensuring the elements necessary for successful territorial development – sustainability, cooperation, sustainable development, and continuity.

Peripherally located small towns and villages in the analysed Lithuanian, Polish and Slovak regions should have a chance for a separate development path compared to big cities and central administrative centres. This is due to their specificity and despite the existing economic problems or the underinvestment in infrastructure in rural areas, the development scenario based on social, natural, and cultural potential should bring tangible profits in the future. Alternative directions of this development may thus become competitive compared to big cities.

Acknowledgements

The research was supported by the project APVV SK-PL-18-0022 LIVA – The Concept of liveability in the context of small towns funded by NAWA – Polish National Agency for Academic Exchange and SRDA – Slovak Research and Development Agency. The article was also written as a result of Agnieszka Jaszczak's internship at STU Bratislava, co-financed by the European Union under the European Social Fund (Operational Program Knowledge Education Development), carried out in the project Development Program at the University of Warmia and Mazury in Olsztyn – POWR.03.05. 00-00-Z310/17.

Academic references

- [1] Agergaard, J., Tacoli, C., Steel, G. & Ørtenblad, S. B. (2019). Revisiting Rural–Urban Transformations and Small-Town Development in Sub-Saharan Africa. *European Journal of Development Research* 31, 2–11. DOI: 10.1057/s41287-018-0182-z.
- [2] Bucur, S. I. (2015). Characteristics and Temporal Gaps of the Rural Space. *Agricultural Economics and Rural Development. New Series*, 12(2), 223–235.
- [3] Csurgó, B. & Megyesi, B. (2016). The Role of Small Towns in Local Place Making. *European Countryside* 8(4), 427–443. DOI: 10.1515/euco-2016-0029.
- [4] Daugirdas, V. & Burneika, D. (2008). Peripherality and peripheral regions in Lithuania – borderland of EU. In Baubinas, R., ed., *Problem regions in Lithuania (sociogeographical aspect)* (pp. 6–21). Vilnius: Geografijos ir geologijos institutas.
- [5] Dax, T. (2014). Shaping rural development research in Europe: acknowledging the interrelationships between agriculture, regional and ecological development. An enhanced research strategy supported by the ERA-NET RURAGRI. *Studies in Agricultural Economics*, 116, 59–66. DOI: 10.7896/j.1408.
- [6] Filipović, M., Kokotović, K. V., Drobnjaković, M. (2016). Small Towns in Serbia – The “Bridge” Between the Urban and the Rural. *European Countryside* 8(4), 462–480. DOI: 10.1515/euco-2016-0031.
- [7] Giemza, K. (2015). Pozycja ustrojowa i wpływ samorządu gminnego na rozwój gospodarczy obszarów wiejskich. In Litwiniuk, P., ed., *Samorząd terytorialny w procesie rozwoju gospodarczego obszarów wiejskich, 25 lat doświadczeń. Nowe wyzwania* (p. 66). Warszawa: Instytut prawa ustrojowego.
- [8] Halás, M. (2008). Priestorová polarizácia spoločnosti s detailným pohľadom na periférne regióny Slovenska. *Sociologický časopis* 44(2), 349–369.
- [9] Halás, M. & Klapka, P. (2015). Spatial influence of regional centres of Slovakia: analysis based on the distance-decay function. *Rendiconti Lincei. Scienze Fisiche e Naturali* 26, 169–185, DOI: 10.1007/s12210-015-0387-4.
- [10] Jaszczak, A. (2009). Od „hinterlandu“ do „innolandu“, czyli jak rozwijać obszary wiejskie. *Polskie Krajobrazy Wiejskie Dawne i Współczesne* (pp. 215–223). Sosnowiec: Komisja Krajobrazu Kulturowego PTG.
- [11] Jaszczak, A. (2015). The Future of Cittaslow Towns, *Architektura Krajobrazu* 1, 70–81.

- [12] Jaszczak, A., Kristianova, K., Sapirova, A. (2019). Revitalization of public space in small towns: Examples from Slovakia and Poland, *Zarządzanie Publiczne*, 45(1), 35–46.
- [13] Knox, P. & Mayer, H. (2009). *Small Town Sustainability*. Basel: Birkhäuser.
- [14] Kresl, P. K. & Ietri, D. (2016). *Smaller Cities in a World of Competitiveness*. London: Routledge.
- [15] Krzysztofik, M. (2017). Problematyka prawna pojęcia obszaru wiejskiego, *Studia Luridica Lublinensia* 26(1), 299–314. DOI: 10.17951/sil.2017.26.1.299.
- [16] Nestorová Dická, J., Gessert, A. & Sninčák, I. (2019). Rural and non-rural municipalities in the Slovak Republic, *Journal of Maps*, 15(1), 84–93. DOI: 10.1080/17445647.2019.1615010.
- [17] Novotný, L., Csachová, S., Kulla, M., Nestorová-Dická, J. & Pregi, L. (2016). Development Trajectories of Small Towns in East Slovakia. *European Countryside*, 8(4), 373–394. DOI: 10.1515/euco-2016-0026.
- [18] Plešivčák, M. & Buček, J. (2017). In the centre, but still on the periphery: Is there any room for development of socio-economically deprived region in Slovakia? *International Journal of Social Economics*, 44(11), 1539–1558, DOI: 10.1108/IJSE-01-2016-0023.
- [19] Piorr, A., Ravetz, J. & Tosics, I., eds. (2015). *Peri-Urbanisation in Europe. Towards European Policies to Sustain Urban-Rural Futures*. København: University of Copenhagen.
- [20] Pociūtė, G. (2014). *Periferingumo teritorinė raiška lietuvoje* [PhD. theses]. Vilnius: University of Vilnius.
- [21] Pociūtė-Sereikienė, G. (2019). Peripheral regions in Lithuania: the results of uneven development. *Regional Studies, Regional Science*. 6(1), 70–77. DOI: 10.1080/21681376.2019.1571437.
- [22] Rakuševičius, R. (2003). *Politologijos žodynas-žinynas*. Vilnius: Žygimantų spaustuvė.
- [23] Rudnicki, R. (2011). Peryferyjność położenia geograficznokomunikacyjnego a wybrane wskaźniki rozwoju powiatów ziemskich. In Wesolowska, M., ed. *Wiejskie obszary peryferyjne – uwarunkowania i czynniki aktywizacji* (pp. 35–57). Warszawa: Instytut Geografii i Przestrzennego Zagospodarowania PAN.
- [24] Runge, A. (2012). Metodologiczne problemy badania miast średnich w Polsce, *Prace Geograficzne*, Zeszyt 129, 83–103.
- [25] Loomis, P. Ch. & Beegle, J. A. (1950). *Rural Social Systems*. New York: Prentice-Hall.
- [26] Spaziante, A. (2014). Rural Development. Challenges and opportunities for Europe. *E3S Web of Conferences* 2, Art. 03005. DOI: 10.1051/e3sconf/20140203005.
- [27] Surchev, P. (2010). Rural Areas – Problems and Opportunities for Development. *Trakia Journal of Sciences*, 8(3), 234–239.
- [28] Székely, V. & Novotný, J. (2019). Spatial differences in public transport accessibility of district centres in the Prešov region, Slovakia, *Prace Komisji Geografii Komunikacji PTG*, 22 (1), 31–43.
- [29] Szymańska, D. (2007). *Urbanizacja na świecie*. Warszawa: PWN.
- [30] Tautvaišaitė, Š. (2007). *Priferinių regionų struktūrinių pokyčių valdymas* [Mag. Theses]. Akademija: Lietuvos žemės ūkio universitetas.
- [31] Vaishar, A. & Zapletalová, J. (2009). Small towns as centres of rural micro-regions. *European Countryside* 1(2), 70–81. DOI: 10.2478/v10091/009-0006-4.
- [32] Vaishar, A., Zapletalová, J. & Nováková, E. (2016). Between Urban and Rural: Sustainability of Small Towns in the Czech Republic. *European Countryside* 8(4), 351–372. DOI: 10.1515/euco-2016-0025.

- [33] Wilczyński, R. (2008). Programy odnowy wsi w Polsce. In Wilkin, J., Nurzyńska, I., eds., *Rural Poland 2008* (pp. 99–116). Warsaw: Foundation for the Development of Polish Agriculture.
- [34] Wilkin, J. (2013). Cele i zasady koordynacji polityk wspierających zrównoważony rozwój obszarów wiejskich. In Heffner, K., ed., *Rozwój obszarów wiejskich w Polsce a polityka spójności Unii Europejskiej: stare problemy i nowe wyzwania* (pp. 25–54). Warszawa: Komitet Przestrzennego Zagospodarowania Kraju.
- [35] Wolski, O. (2017). Odnowa wsi jako przedmiot badań. Ewolucja i systematyzacja pojęcia. *Wieś i Rolnictwo* 175, 121–147. DOI: 10.7366/wir022017/06.

Other sources

- [36] BIP (2016). *Ogólna charakterystyka województwa warmińsko-mazurskiego*. Biuletyn Informacji Publicznej Urzędu Marszałkowskiego Województwa Warmińsko-Mazurskiego w Olsztynie.
- [37] Demographic Yearbook 2017, 2018 of Lithuania, Available at: <https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420>.
- [38] European Commission (2008). Poverty and social exclusion in rural areas. Final study report. Luxembourg, Office for Official Publications of the European Communities. Available at: <http://ec.europa.eu/social/main.jsp?catId=88&langId=it&eventId=158&moreDocuments=yes&tableName=events>.
- [39] Kaimiškujų vietovių įtaka Lietuvos regionų gyvenimo kokybei ir sanglaudai (Influence of rural areas on the quality of life and cohesion of Lithuanian regions) (2006). LŽŪM, mokslinio tyrimo ataskaita (research report). Vadovas: J. Čaplikas.
- [40] Kauno regiono integruota teritorijų vystymo programa (Kaunas region integrated territorial development program) (2015). Įsakymas dėl Kauno regiono integruotos teritorijų vystymo programos patvirtinimo. 2015 m. rugsėjo 9 d. Nr. 1V-709, Vilnius. Available at: <https://www.e-tar.lt/portal/lt/legalAct/1c28b56056fe11e5825682aa0fc6b8d5>.
- [41] Mapbox Studio. Available at: <https://www.mapbox.com/mapbox-studio/>.
- [42] Rural poverty and health systems in the WHO European Region (2010). Briefing on policy issues produced through the WHO/European Commission equity project Copenhagen, WHO Regional Office for Europe. https://www.euro.who.int/data/assets/pdf_file/0019/130726/e94659.pdf.
- [43] Rural Responses to Challenges in Europe (2016). European Network for Rural Development. Available at: <https://enrd.ec.europa.eu/sites/enrd/files/publi-enrd-rr-21-2016-en.pdf>.
- [44] Shrinking rural regions in Europe (2017). Towards smart and innovative approaches to regional development challenges in depopulating rural regions. Policy Brief. Available at: <https://www.espon.eu/sites/default/files/attachments/ESPON%20Policy%20Brief%20on%20Shrinking%20Rural%20Regions.pdf>.
- [45] Statistical Yearbook of Poland (2020). Available at: <https://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/maly-rocznik-statystyczny-polski-2020,1,22.html>.
- [46] Statistical Office of the Slovak Republic, Regional Statistical Yearbook of Slovakia, 2019, Available at: <https://slovak.statistics.sk>.
- [47] Strategia rozwoju społeczno-gospodarczego. Warmińsko-Mazurskie 2030 (2020). Urząd Marszałkowski Województwa Warmińsko-Mazurskiego, Olsztyn.
- [48] Supralocal Program of Revitalisation of Cittaslow Towns. Ponadlokalny Program Rewitalizacji Miast Cittaslow. (2015). Available at: <https://www.wmarr.olsztyn.pl/s/images/stories/>.

- [49] Pliki/2015_06_08_Ponadlokalny_program_rewitalizacji_sieci_miast_Cittaslow.pdf.
- [50] Supralocal Program of Revitalisation of Cittaslow Towns. Ponadlokalny Program Rewitalizacji Miast Cittaslow. 2019. Available at: https://cittaslowpolska.pl/images/PDF/PPR_08_2019.pdf.
- [51] The Act No. 369/1990 on Municipal Establishment of the National Council of the Slovak Republic.
- [52] The Act of August 29, 2003 on official names of places and physiographic objects Dz.U.2019.1443 Art. 2.
- [53] The Agriculture, Food and Rural Development Law of 2002 June 25 No. IX-987, Vilnius.
- [54] The Law on Administrative Units of the Republic of Lithuania and Their Boundaries (1994).
- [55] The Law on Agriculture, Food and Rural Development of the Republic of Lithuania. 2008. Nr. X-1663, 2008-07-01, Žin. 2008, Nr. 81-3174.
- [56] Wieś Warmii, Mazur i Powiśla miejscem, w którym warto żyć... Program Odnowy Wsi Województwa Warmińsko-Mazurskiego (2011). Załącznik nr 1 do uchwały nr 31/429/11/IV Zarządu Województwa Warmińsko-Mazurskiego z dnia 7 czerwca 2011 roku, Zarząd Województwa Warmińsko-Mazurskiego, Olsztyn.