

LITHUANIAN RURAL SETTLEMENTS: THE LEGACY OF SOVIET RURAL PLANNING AND CURRENT CHALLENGES

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Manuscript received: March 19, 2024

Revised version: October 24, 2024

KRIAUCIŪNAS E., BURNEIKA D., UBAREVIČIENĖ R., BARANAUSKIENĖ V., 2025. Lithuanian rural settlements: The legacy of Soviet rural planning and current challenges. *Quaestiones Geographicae* 44(2), Bogucki Wydawnictwo Naukowe, Poznań, pp. 5–17. 3 figs, 2 tables.

ABSTRACT: The article analyses the changes to the system of the distribution of population in rural areas in Lithuania, one of the former Soviet states: it compares the transformation of settlements during the socialist era and the transformations of the rural settlement system after 1990. The aim of this paper is to analyse the results of the Soviet rural settlement planning policy and to evaluate post-Soviet rural development trajectories in Lithuania. Despite different political and economic systems, depopulation was the most important demographical trend in Lithuanian rural areas from the second half of the 20th century. The transformation of rural settlements after the collapse of the Soviet system has been quite chaotic and difficult to control. In the 21st century, both the shrinking periphery and the newly expanding settlements lack the infrastructure of public services.

KEYWORDS: rural settlements, rural planning, Lithuania, post-socialism

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Introduction

This article analyses the changes to the population distribution system in rural areas in Lithuania. It compares the development of the settlement system during the communist era (Lithuania was one of the former Soviet Union Republics) and the transformations of the rural settlement system after 1990 under the market economy. Settlement network transformation processes in post-socialist countries are particularly dependent on historical circumstances (Farago 1999, Bihari, Kovács 2006, Timár, Kovács 2009). The territorial structures change more slowly than social and

economic structures behind them (Sýkora 2009); therefore, spaces created during the Soviet era, which differ significantly from Western or even Central European ones, should be perceived as factors of change, influencing the actual outcomes of peripheralisation and metropolisation processes that are taking place in all post-communist countries (Lang et al. 2022).

The collapse of the socialist system in Eastern and Central Europe brought about many changes in territorial structures, namely in the structure of the economy, territorial distribution of the population, and land use and landscape (Brade et al. 2009, Marcińczak et al. 2014, Biolek et al. 2017,

Izakovičová et al. 2017, 2022, Mulíček, Osman 2018, Malý et al. 2020, Petrovič, Petrikovičová 2021, Vaishar, Šťastná 2021).

During the Soviet era, a network of rural settlements adapted to the needs of kolkhoz-based agriculture was created in Lithuania. When the economic system was changed, the distribution of the rural population also began to change, following pathways common for the Western European countries.

The processes of the redistribution of population influence the structure of settlements, their hierarchy, and the quality of the social environment. The analysis of modern transformations shows that, in recent years, the mistakes of Soviet spatial planning have become particularly apparent.

During the Soviet period, territorial planning of rural settlements in Lithuania was the most developed among other republics of the USSR. The novelty of this study is that it distinguishes the characteristics of Soviet planning, especially in the division of settlements according to functions and purposes and it also makes an attempt at determining the influence of different rural settlements on the current development trajectories. The study can also help examine rural transformations in other former USSR countries.

The main aim of this paper is to analyse the impact of the Soviet rural settlement planning policy on post-Soviet rural development trajectories in Lithuania.

Development of post-Soviet rural areas: Theoretical background

In contemporary regional development theory, socio-spatial polarisation is understood as a multidimensional process occurring in territories of various scales, also encompassing its discursive construction (Lang et al. 2015). Processes of peripheralisation are associated with the nature and characteristics of capitalist society (Hadjimichalis, Hudson 2014).

The trends in rural development are similar across all Western European countries, differing mainly in their periods of change. In post-communist countries, changes often began later and intensified particularly after market economy reforms (Bański 2019). Virtually all theories of

regional development, whether explaining it through the decisions of micro-level actors or the influence of macro-level social structures, can contribute to understanding general trends in rural development, depopulation, economic stagnation, and so forth.

Micro-level theories reconstruct social behaviour from the perspective of the individual, focusing primarily on understanding and implementing human preferences. Certain depopulation or migration trends can be explained by corresponding migration or rational choice theories. These theories help us understand that one of the reasons for demographic trends is the rational desires of the population, leading them to move to agglomerations (metropolises) or return to (or remain in) rural areas. Such spatial behaviour can be understood as a search for a balance between better opportunities for career, education, and social contacts in the city and a larger space and better environment in the countryside. At the same time, we may assume that newly developed 'standard' Soviet rural landscapes and life in multi-flat houses could be factors not favouring the creation of strong place attachment, which may also result in more numerous emigration (Trąbka et al. 2022).

These processes can also be understood through urbanisation cycle theory (Hall, Hay 1980, Champion 2001). The decline in the rural population is a continuation of the urbanisation process that was halted (frozen) during the Soviet era. Compared to Western European countries, both the proportion of the population living in rural areas and the proportion of those employed in agriculture in Lithuania were 3–4 times higher. Suburbanisation leads to the growth of formally rural settlements around the cities.

Structuralist explanations are also used to understand peripheralisation processes. Myrdal's (1957) cumulative causation theory explains the decline of the periphery due to the 'backwash' process, where the lagging region loses human resources as people leave to seek higher incomes and better opportunities in growing regions. Thus, the lagging region loses one of its main development factors – active, young inhabitants – and, despite having lower production factor costs, cannot attract investments. Perroux's (1955) growth pole model also predicts the decline of the periphery in the context of the growing metropolitan regions.

Friedmann's (1966) core-periphery model states that the centre, having better competitive opportunities, more power and authority, grows at the expense of the periphery. In general, polarised development in capitalist countries is perceived as a 'natural' result of a market economy due to market imperfections, agglomeration economies, or the nature of capitalist society and economy (Hadjimichalis, Hudson 2014, Rodríguez-Pose 2018). In Marxist theories, the main cause of uneven regional development is often considered the capitalist mode of production (Dawkins 2003, Harvey 2006). In such cases, rural depopulation is predicted by virtually all structuralist theories, which state that people's choices are essentially adaptive behaviours determined by the nature of the capitalist economy. Under free-market conditions, economic and social development will be characterised by polarisation caused by the natural properties of the market economy, making uneven economic and social development inevitable (Dawkins 2003).

Methods and data

This article presents an analysis of Soviet and post-Soviet transformations of the Lithuanian rural settlement system based mainly on empirical methodology. The main methods of the research are the reference analysis of previous authors' findings and statistical data analysis.

The reference analysis was mostly used for the revelation of trends of changes in rural areas during the Soviet era of the command economy. Various sources were used for the analysis, and first of all we refer to the works and studies of spatial planners who worked at that time (Šešelgis et al. 1951, LTSR *poilsio* (LSSR recreation)... 1968, Maldžiūnas 1970, Šešelgis 1975, 1996, Daniulaitis, Stauskas 1980, Rupas, Vaitekūnas 1980, Vaitekūnas 1989, Vanagas et al. 2002). The results of the research conducted by historians who studied the Soviet period (Truska 1995, Skebas, Spečiūnas 2006) and the findings of modern researchers (Jepsen et al. 2015, Drėmaite et al. 2023) were employed as well as the data from population censuses conducted during the Soviet era in 1969 (*Lietuvos TSR...* (Lithuanian SSR...) 1974) and in 1989 (*1989 metų surašymo...* (data from the census of 1989 ...) 1991).

After the collapse of the communist system in Central and Eastern European countries, one of the most notable processes in the 21st century has been the socio-economic polarisation of their territories (Borén, Gentile 2007, Smith, Timár 2010). Since metropolitan centres attract people from peripheral areas, the population in rural areas declines, and the periphery suffers from a particularly rapid depopulation (Lang 2011, Ehrlich et al. 2012, Lang, Haunstein 2017). These trends are especially evident in the Baltic states, the central cities of which regained the status of capital cities of independent states (Lang et al. 2022). Peripheralisation processes are associated with the nature and characteristics of present capitalist society (Hadjimichalis, Hudson 2014), so sharp reforms of the 1990s resulted in the fast peripheralisation of certain regions dependent on inefficient industry and agriculture. The previous studies show that processes of peripheralisation and socio-economic polarisation also affected Lithuania in various places, from rural areas to medium-sized cities (Stanaitis 2010, Berzins, Zvidrins 2011, Daugirdas et al. 2013, Pociūtė-Sereikienė 2021).

The Indicators database of the Lithuanian Data Agency (Statistics Lithuania) was the main data source for our analysis of the development of rural settlements in Lithuania after 1990 (State Data Agency 2024a). Mostly, we used data from the population censuses (2001, 2011, and 2021). Additionally, previous findings of researchers based on these data were used (Vanagas et al. 2002, Daugirdas et al. 2013, Kriaučiūnas et al. 2016, Burneika et al. 2017, Kriaučiūnas, Burneika 2019). The illustration of demographic trends was based on the mapping of statistically available data. The visual analysis of prepared maps was used for the establishment of regional differences in ongoing trends. The mapping of the statistical data was conducted using the Arc GIS Pro software manufactured by Esri. The changing differences in municipal borders had to be taken into account. The categorisation of Lithuanian territory into different regions according to the centre-periphery axis was based on demographic trends and the geographic location of elderships (in Lithuanian: *seniūnija*) in relation to the main city municipalities of the country. Eldership is the local administrative unit of second (lowest) level (LAU 2) of approximately the same size like Polish *gmina*.

The main results of the Soviet transformation of the rural settlement system

Before the Second World War, Lithuania was an agrarian state, with most of its inhabitants living in the countryside (*Lietuvos gyventojai* (Residents of Lithuania) 1923). The population distribution system consisted mostly of small villages and granges (also homesteads or farmsteads). According to our estimates, the average density of homesteads in a rural area was about 4.6 homesteads per square kilometre.

Such a settlement system was not suitable for the needs of the Soviet regime, imposed in 1940. Although attempts were made to establish a Soviet farming system as early as 1940–1941, it was implemented very rapidly from only about 1949. Under the threat of deportation, farmers were forcibly ‘joining’ the collective farms. In 1948–1949 alone, >70,000 people were exiled from Lithuania and 98.3% of them were rural residents (Skebas, Spečiūnas 2006). At the beginning of 1951, about 90% of individual farms were already reformed into collective farms – kolkhozes¹ or less frequently sovkhoses² (Jepsen et al. 2015).

Collectivisation was directly linked with the transformation of rural settlements. The aim was to evict residents from their homes by moving them into a collective farm settlement. Such a transformation of rural settlements began in 1951 (Šešelgis et al. 1951); it was intended to be completed as soon as possible, but the residents reluctantly moved out of their homes, so the process lasted throughout the whole Soviet era. In 1967, there were still 264,000 granges left: they constituted 73.9% of all rural houses, and 70.5% of rural households lived in them (Maldžiūnas 1970).

Initially, new types of settlements – kolkhoz (sovkhos) settlement – were established quite chaotically. In the 1960s, their development began to be combined with comprehensive planning. The housing reform was implemented in line with a ‘unified settlement system’, a concept popular in the regional planning policies in the USSR (Maldžiūnas 1970, Šešelgis 1975, 1996, Vanagas et al. 2002, etc.). The policy was primarily targeted at medium-sized city development, while in rural areas, granges were destroyed and their inhabitants moved to central kolkhoz settlements, which should provide the most necessary services for their residents and serve as production units of agriculture. In Soviet times, rural settlements were formally classified according to the sector of the economy in which the inhabitants of a particular rural settlement worked. The following functional types of Lithuanian rural settlements were distinguished: agricultural settlements, settlements for forestry workers, settlements for industry workers, settlements performing transport functions (railway settlements), fishing settlements, settlements for science workers, settlements with recreational and treatment functions, collective gardens (dachas), and multifunctional settlements (Rupas, Vaitekūnas 1980, Vaitekūnas 1989). This division of rural settlements was unique to the Soviet system, though it did not always reflect reality because settlements usually had several functions. All agricultural enterprises (kolkhozes and sovkhoses) used about 70% of the entire territory of Lithuania, and agricultural rural settlements accounted for 70%–75% of Lithuanian rural settlements (Rupas, Vaitekūnas 1980). Settlements for agricultural workers were the main concern of the Soviet regime. The historical network of rural towns was transformed, facilitating the development of some settlements and preventing others. The lowest level in the hierarchy of the settlement system was the one rural farm (kolkhoz or sovkhos), which consisted of prospective (central and auxiliary farm settlements) settlements and settlements in undevelopable areas. Larger farms were to be provided with one central farm settlement and several auxiliary settlements, while smaller farms were to be provided with only one central settlement. On average, about 500–550 inhabitants were supposed to live in the ‘central’ settlement (Vaitekūnas 1989), but smaller ones

¹ Kolkhoz – agricultural enterprises of the USSR, based on the collective ownership of the means of production and the collective work of their members – collective farmers. In Lithuania, collective farms were formed through forced collectivisation, expropriating farmers’ land and implements.

² Sovkhos is a state agricultural enterprise of the USSR. Unlike kolkhozes, which were peasant cooperatives, sovkhoses were state-owned enterprises. The employees of the ‘sovkhoses’ were officially workers and had more rights than collective farmers ‘kolkhozniki’. The activities of kolkhozes and sovkhoses were directly controlled by the communist party.

had around 200 inhabitants. Settlements that were classified as unviable (undevelopable) were left to decline as residents gradually moved to central settlements or cities (Maldžiūnas 1970, Šešelgis 1975, Vaitekūnas 1989).

Throughout the period, farms were enlarged, and the number of central settlements decreased steadily: at the beginning of the period, about 6500 kolkhozes were established, and at the end of the Soviet era, about 1000 collective farms and 1086 central farm settlements remained in Lithuania (*Žemės kadastras* 1989).

During the transformation of the rural settlement into a central settlement, the former structure of the settlement was replanned and adapted (Lietuvos TSR... 1974). The rural settlements belonging to central farm settlements consisted of the historical centre with a church and original buildings, the farm's administration building (often with other public services like post or bank office), and other administrative or service buildings (school, kindergarten, shop, canteen, sometimes laundry, public sauna, etc.). A central farm settlement contained from 100 to several hundred individuals and several multi-flat houses. Small multi-flat houses (usually consisting of 4–8 households) were built at the end of the Soviet era, to save money and, officially “trying to bring the countryside closer to a city” (Drėmaitė et al. 2023).

There were fewer settlements in other sectors of the economy (non-agricultural); their hierarchical division was not relevant, and less attention was paid to their development. Settlements for forestry workers were developed only in exceptional cases, in areas of massive forests, where the activities of the population were traditionally related to forests. In most cases, these forestry settlements were left to decline in much the same way as the undevelopable settlements in the agricultural system. Settlements for industrial workers in rural areas were mostly connected to enterprises of extractive industries (peat, clay, sand, sandstone, dolomite, or other construction materials). There were about 150 such settlements established in Lithuania (Vaitekūnas 1989). Settlements for industrial workers consisted mostly of apartment buildings, which were alien bodies in the rural landscape.

Suburban (satellite) rural settlements. The Soviet efforts to disperse economic development

also resulted in the creation of suburban (or actually peri-urban) farms, which specialised in vegetable cultivation (mainly greenhouses), gardening, and poultry. These less durable or difficult-to-transport goods had to be located in the vicinity of larger cities. It should be noted that these satellite settlements were attractive places to live and, thus, expanded faster than planned.

Settlements of collective gardens (*dachas*) in suburban locations were developed to reduce food deficit and, later, for recreation of urban population. They did not have the status of a settlement, but many urban residents were able to build summer houses in their six ares' land plots, which were used also for residential purposes.

Recreational settlements. Along with comprehensive spatial planning, recreational spatial planning took place during the Soviet era (LTSR *poilsio*... 1968, Daniulaitis, Stauskas 1980). Initially, more attention was paid to the establishment of recreation bases, and later, settlements – tourism service centres – were also planned (Daniulaitis, Stauskas 1980). Only resort settlements were exclusively recreational, and some rural settlements near larger water bodies may be called only partially recreational.

Transformation plans of the settlement system were adjusted and updated (Drėmaitė et al. 2023), but in reality, there was often a failure to implement them – sometimes, unplanned settlements expanded, and those planned for development declined (especially in peripheral areas). Even at the time, the geographical location of the settlement had a strong influence. Rural settlements close to cities grew faster. Even during the era of the command economy, there were intense processes of suburban growth and peripheralisation (Rupas, Vaitekūnas 1980). Virtually all settlements, both urban and rural, grew at the expense of smaller villages and granges. The relocation of all inhabitants of small villages and granges to central rural settlements had not been completed until the end of the Soviet era.

Post-Soviet trends in the development of rural settlements

The collapse of the Soviet system and the subsequent changes in the economic system also fundamentally changed the trajectories of

settlement development. The inherited network of settlements adapted to collective farming was no longer suitable for the new economic relations, and the free movement of people began. The former Soviet division of settlements by function was also rendered obsolete.

In the former settlements for agricultural workers, the most important factor of the transformation was the collapse of collective farms and the fast shrinkage of employment. From 1990 to 2019, the number of people employed in agriculture and related activities decreased approximately four times (by over 260,000), and currently, only 5.05% of all employees work in agriculture (State Data Agency 2024). Not only has the efficiency of agriculture increased significantly, but the specialisation of farming has also notably changed. The share of livestock production, which used to account for 70% of all agricultural production, decreased and crop production increased (approximately 70% of agricultural production in 2022). This change has also contributed to the decline in the number of people employed in agriculture (Kriaučiūnas, Burneika 2019).

The decreasing number of jobs in agriculture brought one significant territorial change to rural areas – the place of residence has become separated from the workplace. In many cases, rural areas lost their roles as the main ‘employers’ of their residents. Rural areas became places of residence or recreation for people working in the city. These changes have ‘ranked’ rural settlements according to their attractiveness as residential areas.

The distance from the city became the most important factor, defining the trends of population change in most non-metropolitan settlements in Lithuania (Ubarevičienė 2018).

As a result of the mentioned trends, many rural peripheral LAU 2 regions (elderships) lost >40% of their residents during the past two decades (Fig. 2). In general, the rates of rural depopulation were similar in both the Soviet era and after 1990 (Fig. 1). Statistically, rural areas lost more population during the Soviet than in the post-Soviet period (484,000 in 1959–1989 and 262,000 in 1990–2020). It is interesting to note that the decline in rural population after 1990 practically coincides with the decline in the number of people employed in agriculture (Kriaučiūnas,

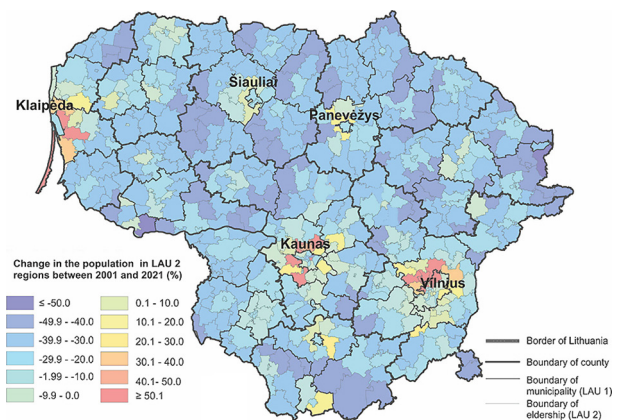


Fig. 2. Changes in the population in LAU 2 regions between 2001 and 2021 (authors' calculations based on data from the 2001 and 2021 population and housing census of the State Data Agency, 2024b; the map was elaborated by Baranauskienė).

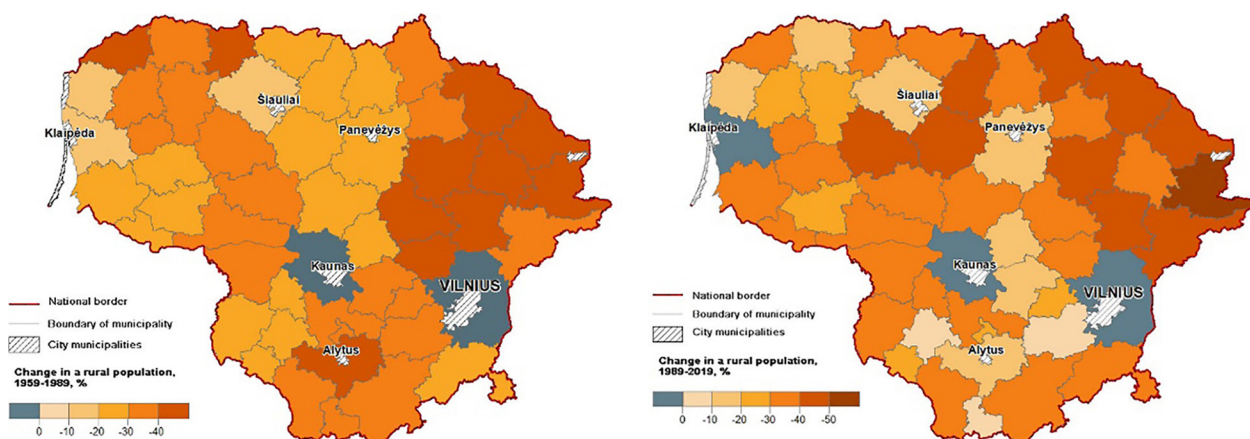


Fig. 1. Rural population changes in Lithuania during the periods of 1959–1989 and 1989–2019 (data: Lietuvos TSR... (Lithuanian SSR...) 1974, 1989 metų surašymo... (data from the census of 1989 ...) 1991, State Data Agency 2024a. Recalculated by the authors according to the current administrative boundaries; authors' elaboration).

Burneika 2019). We must note that the degree of the decrease during recent decades is somewhat hidden by growing suburban settlements, which are officially designated as rural areas.

Although the pace of depopulation has remained similar, the specific situation in particular places differs a lot. Primarily due to the long-lasting process of depopulation, some ageing peripheral areas became so sparsely populated that public service networks are shrinking fast (Daugirdas et al. 2013).

After the restoration of independence, the population began to decline in virtually all settlements due to emigration (Table 1). After 1990, and especially with the acceleration of rural depopulation in the 21st century, the population began to decline in the previously relatively stable former central settlements. The natural population change in rural areas has also reached negative digits (Daugirdas et al. 2013). Though depopulation dominates, the situation in geographically different settlements is not the same.

Territorial polarisation and the development of rural settlements

The developmental trends in rural settlements have a very polarised character in Lithuania, and we can find both fast-growing and shrinking or even disappearing settlements. The main trends in the development of rural settlements are highly influenced by their location in relation to the three major metropolitan centres (Ubarevičienė 2018). In this article, we present the categorisation of Lithuania's territory created by the authors, taking into account the centre-periphery factor.

Based on the centre-periphery model and previous studies conducted in Lithuania (Burneika et al. 2017, Pociūtė-Sereikienė 2019, Lang et al. 2022, Ščerbinskaitė 2022), the territory of Lithuania was divided into five categories: metropolitan cities, suburban regions, peri-urban regions, transition areas, and peripheral regions. Two main criteria were used for the classification – geographical

Table 1. Demographic trends in different categories of settlements during the Soviet era and after 1990.

Settlement type	Soviet era		1990–2021	
	Prevailing trend	Remarks	Prevailing trend	Remarks
General regularities in Lithuania	Total population is growing.	Migration from small rural settlements to larger rural settlements and cities is predominant. Natural population change is positive.	Total population is declining. Population is growing in capital (Vilnius) and suburbs of all cities. It is declining everywhere else.	Large-scale emigration. Labour migration from rural and smaller towns to large cities is prevalent type of internal migration. Natural population change is negative.
Suburbs (outside city limits)	Population is growing (despite territorial regulation of population).	Population is growing at expense of rural population settling around cities.	In suburbs of both big and small cities, population is growing.	Population is growing due to people moving out of cities. Most of them are young families. Natural population change is positive.
Former central kolkhoz settlements, present administrative rural (LAU-2) centres	Population is growing.	Population is growing at expense of surrounding small villages and granges. Natural population change is positive.	Population is declining rapidly.	Emigration to foreign countries and large cities is predominant. Natural population change is negative.
Small rural settlements and granges	Small rural settlements are declining. Granges are being rapidly destroyed.	Main reason for decline is Soviet government's policy of destroying granges.	Population is declining. The smallest rural settlements and granges disappear.	Emigration to foreign countries and large cities is predominant. Due to age structure of population, mortality rates are several times higher than birth rates.

proximity to cities (six Lithuanian cities with >50,000 inhabitants; 30 min., 45 min., and 60 min. accessibility by car) and population change trajectories (2011–2021) (Fig. 3 and Table 2):

1. Metropolitan cities represent the main centres in the centre–periphery hierarchy. These are cities with >50,000 inhabitants (Vilnius, Kaunas, Klaipėda, Šiauliai, Panevėžys, and Alytus); their population trends varied – some grew, while others shrank.
2. Suburban regions consist of cities and suburbs but also cover less urbanised areas with a mix of suburban and rural settlements; their population either increased or remained stable.
3. Peri-urban regions are semi-urban areas, semi-rural but closely linked to major cities (with an average population decrease in many cases of up to 15%, especially in rural municipalities with higher depopulation rates). These areas are located up to a 45-minute drive from the largest Lithuanian cities, Vilnius and Kaunas, and up to 30 minutes from other major cities.

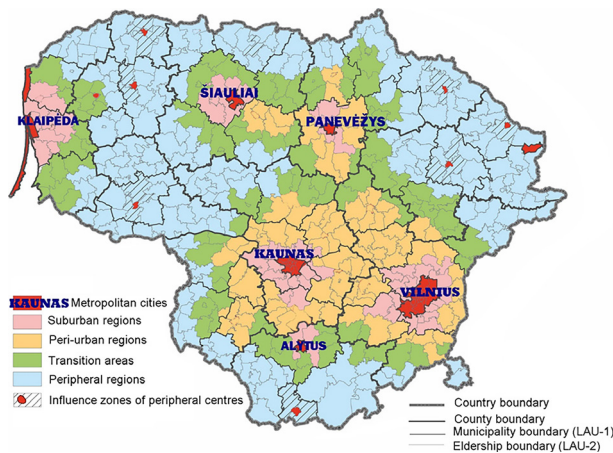


Fig. 3. The categorisation of Lithuanian territory according to the centre–periphery hierarchy at the level of LAU-2 regions (authors' elaboration).

4. Transition areas are predominantly rural areas with depopulation ranging from 15% to 20% or more, located within a 45- to 60-minute drive from the largest cities and 30–45 minutes from the regional cities.
5. Peripheral regions are primarily rural regions experiencing significant depopulation, often exceeding 20%; they are located more than a 60-minute drive from the largest cities and 45 minutes from regional cities. In these regions, peripheral centres stand out – cities (municipal centres), which, depending on their size (and geographical position), also influence the development trajectories of the surrounding territories (however, that effect is local). Most of the land border zones (except the Vilnius zone) fall into peripheral regions.

The major Lithuanian cities, in terms of population size and their significance in the processes of centralisation and peripheralisation, are unequal (at the beginning of 2024, Vilnius had 602,000 inhabitants, Kaunas – 304,000, Klaipėda – 159,000, Šiauliai – 110,500, Panevėžys – 86,600, and Alytus – 51,400 [State Data Agency 2024a]). Therefore, the centralisation process is primarily driven by the main metropolitan cities of Vilnius, Kaunas, and Klaipėda (Burneika et al. 2017). As the distance from these cities increases, the processes of depopulation and peripheralisation intensify (Fig. 2), which are somewhat 'mitigated' by other major city municipalities – Šiauliai, Panevėžys, and Alytus, but only at a very small, local scale. In general, these cities are surrounded by areas heavily affected by depopulation (Fig. 2).

Another very important aspect is that smaller Lithuanian cities were 'grown' during the Soviet era as regional industrial centres. After the collapse of the USSR, most industrial enterprises went bankrupt, and new companies capable of

Table 2. Some geographic and demographic characteristics of different types of regions (authors' calculations based on data from the State Data Agency, 2024b).

Regions	Population change in 2011–2021 (%)		Population density in 2021 inhabitants/km ²		Occupied part of Lithuania's area (%)	Population in 2021, thous./part of Lithuania's population (%)
	In general	Urban/rural	In general	Rural		
Metropolitan cities	–2.6	–2.6/–	1471	–	1.3	1283/44.4
Suburban regions	5.86	–0.9/8.9	60.3	47.2	9.0	345/12.3
Peri-urban regions	–12.6	–10.5/–14.7	30.1	15.1	18.4	362/12.9
Transition areas	–16.1	–11.5/–18.3	17.6	12.6	22.8	270/9.6
Peripheral regions	–16.2	–12.2/–19.6	18.5	10.9	48.5	585/20.8
In Lithuania	–7.6	–5.6/–11.7	43.1	14.1	100	2811/100

providing jobs for the population were established more slowly than in the major cities. This has significantly affected not only the development of the cities themselves but also their potential to influence the development of surrounding areas as regional-forming cities.

Suburban settlements. Because of favourable geographical location, rural areas close to the main cities were growing the fastest. The suburban sprawl in Lithuania has been very intensive, like in other metropolitan cities of Eastern and Central Europe (Borén, Gentile 2007, Gentile et al. 2012). In Lithuania, the suburbs expand up to about 30 km next to the capital and larger cities and up to 10 km next to smaller city municipalities (Burneika et al. 2017). Neither the size of the settlement nor the specifics of the activities of the former enterprises matter. Most of the former collective garden areas around municipal centres chaotically transformed into suburban ones. Because of the proximity to the city centre and available land plots, these settlements were growing the fastest (Kriaučiūnas et al. 2014, Burneika et al. 2017).

Rural settlements in recreational regions and settlements for forestry workers (mostly in north-eastern and southern Lithuania) have also been in the position of the winner, although their permanent population has been declining rapidly since 1990. These are usually green areas with many water bodies that are sparsely populated due to poor agricultural resources. Homesteads of forestry or agricultural workers are purchased and converted into second summer houses. Such 'second homes' are not statistically registered, and the number of multilocal residents is unknown, but it has been recorded that the recreational use of such landscapes is growing. In some local areas (LAU 2 level), during the high season, up to 50% of jobs are concentrated in homesteads providing accommodation and other recreational services (Kriaučiūnas et al. 2023). Therefore, the recreational function is overshadowing the function of agriculture and forestry in many nature-rich rural areas.

Settlements for industry workers in rural areas. Owing to the collapse of many inefficient Soviet industries, a high number of workers lost their jobs when the market economy was established. The further development of industry-linked rural settlements has depended

mainly on the geographical location in relation to cities and, to a much lesser extent, on the viability of the industrial enterprise. In remote settlements, even where businesses survived, they have significantly reduced the number of employees. The predominant building type (apartment buildings) seemed particularly unattractive in a rural setting both for local residents and for newcomers. The Soviet era's attempt to create an urban environment in rural areas was extremely unsuccessful; many such buildings are either abandoned or has socially deprived residents.

We also have to note that in all cases, we just presented the prevailing trends, though the exceptions can always be found. General trends, defined by macro-level factors are obvious but micro-level actors are important, and some active leaders, together with local rural communities, are making positive changes even in former industrial settlements.

However, even the rural spaces growing as a result of metropolisation processes cannot be regarded as purely successful places. Sprawling cities transform rural spaces but new settlements rarely develop instead of older rural households, so new and older communities live close to each other, and rural landscapes survive to some extent (Ubarevičienė, Burneika 2020). Socio-demographic differences between old and new communities often result in poor planning, conservative strategies of local development, political tensions, and underdevelopment of public services (Ubarevičienė et al. 2015).

Most declining rural peripheries face quite similar challenges. The decreasing population results in the shrinkage of most public services. Schools, kindergartens, and post offices close and medical services are in decline, which is common for most rural municipalities. This reduces employment in rural areas, damages their attractiveness for old and new residents, and makes the shrinkage even easier (Baranauskienė 2021). Finally, the depopulation results in shrinking commercial services, though this is not the case in recreational areas that have a high share of seasonal residents, which, however, disappear both from statistics and local development strategies (Kriaučiūnas et al. 2023). The peripheral rural towns have lost their function as service-providing centres, and their residents have to commute to the nearest town for various reasons (work,

shopping, public services). This is a challenge for elderly single people, especially given shrinking public transport networks. It is also a challenge for some school-age children, as post-school activities (such as sporting clubs) are becoming out of reach without parents' help (Kriaučiūnas et al. 2016, Baranauskienė, Daugirdas 2017, Baranauskienė 2021).

The peripheral areas of predominantly rural municipalities have a surplus of unused or underused facilities, which has become a financial burden for them. Sometimes such unused public or private buildings damage rural landscapes and their attractiveness. Many services which remain in rural towns are suffering from small markets and operating costs are very high. Although population shrinkage seems to be a prevailing trend for at least the near future, municipalities are reluctant to develop smart shrinking strategies as the majority of municipal master plans and development strategies are still growth-oriented. Instead of concentrating on public service quality and increased mobility of both the population and services, municipalities often try to keep existing public service networks even when the number of users is minimal. Closing a school is not a popular move, and municipalities tend to fund them instead. Many such cases are visible even in the national media (Jurčenkaitė 2019).

Thus, there is a problem with public infrastructure in both the growing suburbs and the declining peripheries. In the first case, it is simply not yet in place, and in the second case, the demand is no longer sufficient, and municipal administrations either have to close existing facilities or keep running the costly services. The absence of regional-level governing and planning results in peripheralisation inside municipalities as services are closed in neighbouring towns of different municipalities even when the number of residents there is sufficient for services to operate. Public transport links also often end with the limits of a municipality. Cooperation strategies between municipalities exist but are scarce because they are competing for the same market. On the other hand, small places, such as local administrative units, have no self-governing and very few resources for bottom-up initiatives, which could help make smaller places more attractive for local communities and newcomers.

Conclusions and generalisation

Despite different political and economic systems, depopulation has been the dominant trend of development in rural areas of Lithuania since the 1950s. It can be regarded as some specific type of urbanisation influenced by the rural development policy of the Soviet era. Rural depopulation was less intensive during the Soviet period because of pursued policies to withhold labour force in ineffective Soviet agriculture and because of higher birth rates. The rural shrinkage at that time was accompanied by the growth of urban centres of all sizes across the whole territory of Lithuania. Society was redistributed along the rural-urban axis. The current depopulation in the country involves all types of settlements, from granges to cities, apart from growing metropolitan regions. Spatially, Lithuanian society is redistributed along centre(s)-periphery axis, and there are little or no premises to expect major changes in this trend in the near future, keeping in mind the age structure of residents in peripheral areas.

The Soviet transformation of the settlement system ignored Lithuanian rural traditions, and the attempt to destroy all small rural settlements was motivated only politically. Owing to the inefficiency of the Soviet economy and other reasons (traditions, the historical network of settlements, landscape features, etc.), the plan to destroy small rural settlements and create a network of 'advanced' central farm settlements was only partially implemented.

The processes determined by the neoliberal economic system were particularly favourable to the polarisation of the territory – the growth of large centres and the decline of peripheral territories. The settlement system began to transform, and, in the process, the mistakes of Soviet rural planning became apparent: central farm settlements became unattractive, and people began to look for work and residence elsewhere (in cities and abroad).

As settlements transform, both the growing suburbs and the declining peripheries face problems. In the first case, the adaptation of smart shrinking strategies is necessary because this trend will not change in the near future. Realities have so far rendered these regrowth approaches largely wishful thinking (Albrecht, Kortelainen

2020). At the same time, the shrinkage of service networks should be compensated by the increasing mobility of the population and services, along with the growing quality of more distant public infrastructure.

The transformation of Lithuanian rural settlements can be understood as a process of adaptation to the reality of a liberal market economy. The system of rural settlements is changing chaotically, and most of the policy instruments implemented by the municipalities or the state ignore or oppose the reality. Such policies do not and cannot produce any positive results. In any case, it is not the 'settlement' or the 'economy' that is suffering; it is the individual who is having a harder time accessing public services and ensuring the well-being of themselves and their families.

In the authors' opinion, it is necessary to reorient the current state policies towards rural areas from 'following or opposing trends' to creating and ensuring the well-being of people in specific areas.

Acknowledgements

This paper presents the results of the research project "Peripheral regions in Lithuania: Migration and local communities". This project has received funding from the Research Council of Lithuania (LMTLT), Agreement No [S-MIP-21-57].

Author's contribution

EK: methodology, writing – original draft, conceptualisation, visualisation; DB: writing – review and editing, conceptualisation; RU: writing – review and editing; VB: editing, map making, visualisation.

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