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Rural settlement pattern in Belarus

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Abstract. The article presents the analysis of the Belarusian rural settlement system over the period of the years 1959–2009. Spatial and temporal shifts in the rural population distribution and settlement structure were found, and types of the Belarusian rural settlement pattern were developed. Distribution features and demographic development of a new form of the Belarusian rural communities – agrotowns – were discovered.

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1. Introduction

In the latter half of the 20th century socioeconomic development of the post-industrial countries underwent qualitative changes connected with demographic transition into the quasi-equilibrium status. These particularly included low birth rate, low mortality and low or negative population growth.

Demographic factors had a leading role in the development of settlement processes, especially in rural areas, in many countries of Central and Eastern Europe. Spatial shifts induced by demographic trends occurred in rural settlement in European countries. Under the influence of demographic factors a well-established settlement pattern undergoes changes, community functions diversify, and ecological and agricultural burden increases.

The above-mentioned range of issues makes economic and geographic studies of settlement processes of the European countries topical in the 21st century. In the situation of need for sustainable development and revival of rural areas, these problems assume greater importance for the Republic of Belarus, in the rural settlement of which significant spatial disbalances emerge. Creating special rural communities in Belarus, particularly agrotowns, can arouse international interest and the research on revitalisation processes in rural areas.

Fundamental scientific school of settlement geography was created within the economic geography of the USSR. In the post-Soviet period the problems of regional demographic development of rural areas and regional mechanisms of rural settlement were studied thoroughly. However, as the scientific views evolved factors and objects of research transformed. As a result, a lot of theoretical and practical questions regarding geographic rural settlement analysis remained unexplored. These include upgrading methodology of complex economic-geographical rural settlement analysis with due consideration of international practice and development of geoinformation technology; implementation of geodemographic research on rural areas based on the analysis of spatial-temporal shifts of the turn of the 20th and 21st century, etc.

Since the late 20th century Belarusian rural settlement system, having resulted from a combination of natural and historical factors, showed a number of transformational trends that are the evidence of the substantial spatial and temporal shifts in the settlement system. The main factors which influenced the changes in the spatial structure and pattern of the rural settlement in the 20th century in Belarus, are the following: (a) pre-WWI industrialisation; (b) World War I and the Civil War; (c) collectivisation, creation of co-operative farms, active industrialisation and transport construction; (d) World War II, (e) peculiarities of the post-WWII economic recovery; (f) demographic transformation; (g) political changes of the last two decades and their influence on the economy. Over the whole 20th century, administrative territorial transformation did not the least influence the evolution of the rural settlement. In the 21st century the demographic factor is dominant in the transformation of the Belarusian rural settlement patterns.

2. Research methodology

Modern geographical science imposes new methodological requirements on the settlement studies. Unlike the previous papers, in which Belarusian rural settlement was traditionally studied through the settlement analysis, this study is the first to present a two-component analysis following the procedure of Russian economic geographers (Luhmanov, 1988; Simagin, 2000, 2004). This analysis means, on the one hand, the discovery of patterns in the *general* rural settlement structure, and on the other hand, the *internal* structure, i.e. patterns in the classes of rural communities by population size.

The study comprised the following stages: programmed, informational, analytical, geographical systematisation and constructive. During the programmed stage the object and subject of the scientific research were defined and the framework task of the study was established. The informational stage consisted of collecting, processing and forming databases of rural settlement characteristics by administrative districts over the period of 1959–2009. The analytical stage presented the abstraction and analysis of rural settlement characteristics of Belarus (population size and density of rural population, the number of rural settlements, average size of rural communities by population size, rural population density, average distance among rural communities) with future development of rural settlement typologies of Belarus.

The following methods were used during the study: factor analysis, cluster analysis with the STATISTICA software package, the method of time series, the method of grouping ranking and typologies, and geoinformation map-making.

The study period covers the years 1959–2009, in the course of which large-scale evolutionary and transformational changes in the spatial structure of the Belarusian rural settlement took place. Population censuses, carried out in the USSR in 1959 and 1979 and in Belarus in 1999 and 2009, served as the informational basis.

Map-making of rural settlement processes of Belarus was carried out with the use of geoinformation technologies and the ArcGIS package.

3. Analysis and results

Modern Belarusian rural settlement system has 23,467 rural settlements which were historically characterised by non-uniformity of spatial distribution due to the natural landscape factor.

The influence of environmental conditions on rural settlement first became the subject matter of the V.P. Semenov-Tyan-Shansky's study (1910) who reckoned the Belarusian rural settlement system among 'the central non-chernozem type, morainic and steeply-sloping subtypes, mainly agricultural, led by the water-parting position of the most opportune soils with its uniform watering by the surface and subsoil waters'.

In Belarus the first wide range studies of the rural settlement system were carried out by A.A. Smolich (1929). They showed a mosaic of rural settlement in Belarusian Soviet Socialist Republic (excluding the Western regions), highly diversified by the types of regional landscapes.

In the latter half of the 20th century, a wide range of economic and geographical research on rural settlement (Klimova T.A., Krishchanovich V.Y., Manak B.A., Sidor S.I., Spizhankov L.I., Trukhan I.I., Voytovich M.S., Zhuchevich V.A. *et al.*) complemented the physiogeographic landscape studies, showing particular features of rural communities pattern and morphology in different landscapes (N.K. Klitsunova).

The zone analysis of the Belarusian rural settlement features shows that its territorial structure retains certain traits of stability with signs

of strengthening differences between individual zones. Zone peculiarities of the rural settlement retain the general characteristics while the borders of the selected types are shifting.

The northern zone of the Poozer'ye settlement with small rural communities by the population size and relatively high density of communities, in comparison with 1959, significantly expanded, having increased the overall number of administrative districts by half (from 23 to 34), thanks to the northern districts of the Grodno, Minsk and partially Mogilev regions. Hilly lacustrine morainic, glacial morainic and lacustrine morainic landscapes, which created a significant diversity of rural settlement in 1959, became less diverse under the influence of the socio-economic and demographic factors. However, the greatest number of Belarusian rural settlement types is concentrated in this zone (Table 1).

The central zone of mainly flat rural communities of medium population size with a prevalence of the hilly morainic erosive and secondary morainic landscapes of the West Belarusian elevated province, secondary aqueo-glacial and morainic and outwash landscapes of the East Belarusian province are characterised by a higher relative stability (the number of districts has decreased from 57 to 53). However, the reduction of the average population size of rural communities and their density is observed in this region too, with the spatial extension to a number of districts in the southern Minsk and northern Gomel regions.

The Southern Polessie, the zone with rural communities of large population size, predominantly on the alluvial terrace, secondary aqueo-glacial

Table 1. Regional structure of rural settlement and rural population distribution in Belarus

Regions	A		B	
	a	b	c	d
Brest	2,167	9	467.7	20
Vitebsk	6,316	27	318.8	14
Gomel	2,403	10	376.1	16
Grodno	4,338	19	317.0	13
Minsk	5,208	22	623.7	26
Mogilev	3,035	13	255.5	11
Belarus	23,467	100	2,358.8	100

Explanation: A – number of rural communities; B – rural population size; a – locations; b – %; c – thousands of people

Source: Own compilation based on Population of Belarus: statistical digests 2011

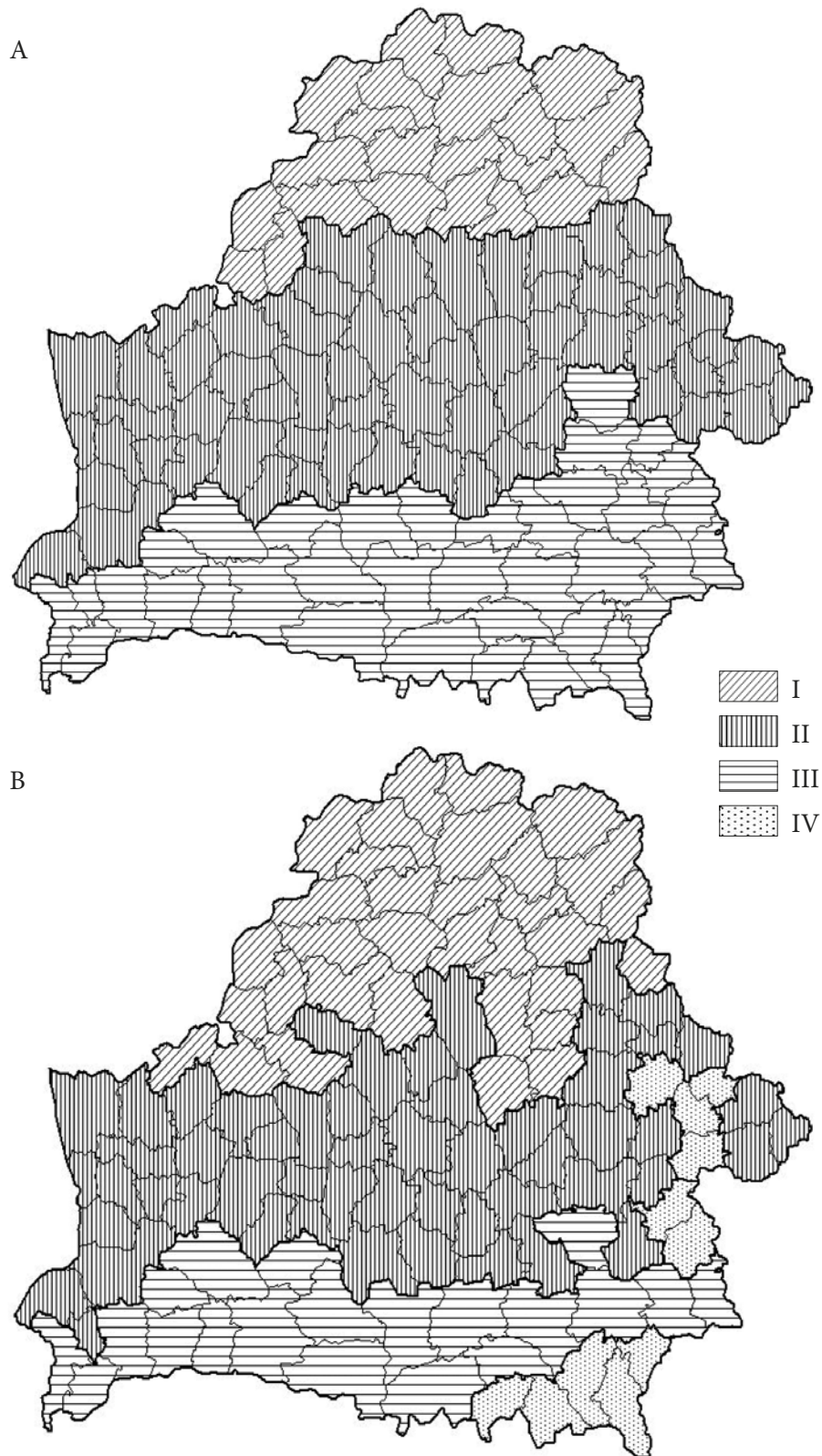


Fig. 1. Natural conditioning of the Belarusian rural settlement system

Explanation: I – Northern Polessie rural communities with small population; II – Central flat rural communities with medium population; III – Southern Polessie rural communities with large population; IV – Rural communities with small population and density of distinctly transformed nature; A – 1959; B – 1999

Source: Population census of USSR 1959, Population census of the Republic of Belarus 1999

and marshy landscapes, having significantly reduced its area (from 37 to 2 districts), retains the average density of communities, while the average population size of communities decrease is less abrupt. While the noted spatial characteristics are retained, under the influence of the anthropogenic disaster at the Chernobyl nuclear power station, the fourth type of rural communities of small population size and density (11 districts) of a distinctly transformed nature were formed in the southeast of the second and third areas (Pirozhnik, Antipova, 2008) (Fig. 1).

In the latter half of the 20th century natural landscape factors in the Belarusian rural settlement dynamics were pushed aside by the socio-economic policy, but did not lose their influence. Taking the place of the 'passive substrate' in the conception of the rational nature management of the new steady development paradigm, they have the role of the core component of the rational territorial organisation for the society's life-sustaining environment.

The period of 1959–1970 is characterised by the dominant effect of economic factors, among which urbanisation played the main role. For the rural population this period goes down in history as the first stable period of negative population dynamics. The period of 1970–1979 is also characterised by the prevalence of socio-economic factors, conditioned by the future industrialisation of the country, which as before entailed scale rural-urban migration. However, the beginning of the demographic factor effect is a characteristic of this period – starting from 1975 the natural loss of population begins in rural areas of Belarus and constant increase of annual rates of population loss takes place. The period of 1979–1989 is notable for the influence of the ecological factor, conditioned by the accident in the Chernobyl nuclear power station, which led to the transformation of rural settlement at this stage, first of all in the Gomel region. The influence of the demographic factor does not decrease. The period of 1989–1999–2009 is characterised by the influence of four factors: political and socio-economic of the transformation character, connected with the collapse of the socialist economy system, the disintegration of the USSR and the acquisition of sovereignty by the Republic of Belarus; the ecological factor (due to indirect

consequences of the Chernobyl accident) and the demographic factor. In whole, under the influence of these factors structural transformation took place, both regarding urban and rural population of Belarus. While in 1959 the share of rural population was 70% and of urban population – 30%, in 1999 this ratio was the opposite.

Contemporarily, general depopulation of rural areas and regional polarisation of demographic development exert greater influence on the change of rural settlement pattern of the state.

At the level of administrative districts, spatial trends of rural settlement are influenced by different factors. In accordance with the trend of rural population dynamics in Belarus, characterised by the gradual decrease in 1959–2009, the following spatial regularities were identified: persistent long-term negative rural population dynamics is distinctive for peripheral districts with low agricultural potential or with extensive natural systems; the reduction of rural population set in later in the areas of transition type with high agricultural or recreation potential, as well as in 'the special Chernobyl region'; the capital region is an active and potential area of demographic growth due to immigration as well as to the natural fertility which is more important for improving the demographic situation in the country.

Under the influence of the demographic factor – the natural and migratory population decline, a decline in the average population size of the rural communities was recorded in the Belarusian rural areas. The average size of a modern Belarusian village decreased about 2.5 times in comparison with 1959 and amounted to 103 people in 2009 (Table 2). In the Brest region, the average population size of rural communities decreased by about 30%, in the Minsk region – by 40%, in the Vitebsk and Grodno regions – by 50% and in the Gomel and Mogilev regions – by 60%.

With regard to the classes of rural communities by population size, a change in the average population size of rural settlements took place. In all classes, except semi-medium, the average population size of rural communities decreased. As a result of the decrease of the average rural communities population size and transformation of larger settlements into smaller ones, the number of the smallest settlements increased three-fold since

Table 2. Dynamics of Belarusian rural settlement indexes

A	Years	Regions						Belarus
		Brest	Vitebsk	Gomel	Grodno	Minsk	Mogilev	
B	1959	347	115	406	168	210	264	252
	2009	223	53	158	77	122	87	103
C	1959	8	17	6	19	14	11	13
	2009	7	16	6	17	13	11	12
D	1959	4	2	4	2	3	3	3
	2009	4	2.5	4	2.4	3	3	3
E	1959	26.5	19.8	23.6	31.4	28.2	25.7	26
	2009	14.7	8.3	9.7	13.0	16.0	9.2	12
F	1999	116	32	71	31	90	25	365
	2009	88	24	51	28	89	22	302
G	1999	8	236	307	78	53	25	763
	2009	40	589	235	214	156	161	1,395

Explanation: A – rural settlement indexes; B – average population size of rural communities, people; C – density of rural communities, per 100 sq. km; D – average distance among rural communities, km; E – population density, people per sq. km; F – number of rural communities with population size over 1,000 people; G – number of uninhabited rural communities

Source: Own compilation based on Population of Belarus: statistical digests 1970–2011

Table 3. Change of the average population size of the Belarusian rural communities according to classes by population size

A	B				C
	A	b	c	d	
Tiny, less than 50	29	28	20	17	0.58
Small, 51-100	93	74	82	71	0.76
Medium, 101-200	146	140	140	142	0.97
Semi-medium, 201-500	362	359	374	321	0.88
Large, 501-1000	708	666	679	674	0.95
Largest, above 1000	1,263	1,568	1,764	1,862	1.47

Explanation: A – classes of rural communities by population size, people; B – average population size of rural communities by population size classes; C – dynamics index, 2009/1959; a – 1959; b – 1979; c – 1999; d – 2009

Source: Own compilation based on Population of Belarus: statistical digests 1970–2011

1959. All the other village categories quantitatively decreased (Table 3).

Over the period of 1959–2009 a structural transformation took place in the Belarusian rural settlement. While in 1959 rural communities with the population size of 101–200 and 201–500 prevailed (30% and 24%, accordingly), in 2009 the structure deformed towards smaller rural settlement population sizes: in the settlement structure communities with the population lower than 50 and 51–100 people account for 61% and 12%, accordingly. At the same time, a reduction and a structural redistribution of the demographic potential took place.

In 1959 about 40% of the Belarusian rural population dwelled in semi-medium rural communities, and one fifth lived in medium and large communities. According to the materials on the population census of 2009, as in the 1959, the majority of rural population lives in semi-medium, as well as the largest villages. However, a redistribution of the demographic potential into large and the largest rural communities occurred. In comparison to 1959, when only 12% of Belarusian rural population lived in the largest villages, currently 20% of the population is concentrated in this village class (Table 4).

Table 4. Structural shifts in the Belarusian rural settlement system

A	B				C			
	a	b	c	d	a	b	c	d
Tiny, less than 50	17	36	55	62	2	6	8	10
Small, 51-100	20	12	15	12	8	10	10	9
Medium, 101-200	30	27	13	8	20	19	13	11
Semi-medium, 201-500	24	19	8	8	38	31	25	25
Large, 501-1,000	7	5	4	3	20	19	22	22
Largest, above 1,000	2	2	2	1	12	16	21	23
Uninhabited	-	-	3	6	-	-	-	-
Total	100	100	100	100	100	100	100	100

Explanation: A – classes of rural communities by population size, people; B – share of rural communities in the Belarusian rural settlement structure,%; C – share of rural population in the overall Belarusian population,%

Source: Own compilation based on Population of Belarus: statistical digests 1970–2011

Along with the structural changes in rural settlement, an imbalance between the types of rural settlements took place. For instance, in 1959 the prevailing type of the Belarusian villages (101-200 people) was represented by one community in three, while in 2009 it is more than one in two.

Thus, the main trend of the Belarusian rural settlement system dynamics over the period of 1959–2009 is the transformation of the settlement structure towards the communities with small population size, while in the rural population distribution there is a shift towards larger rural settlements. This dynamics feature allows the author to classify the Belarusian rural settlement structure to the type that is characterised by the population concentration in large communities, having an insignificant share in the settlement structure (Simagin, 2004) (Fig. 2).

With regard to the Belarusian regions, hypertrophied rural communities with small population size became the main feature of rural settlement in the Vitebsk region, where small settlements account to 72%. In the Minsk, Mogilev and Grodno regions about 50% of the settlements belong to this category. The Brest and Gomel regions form the only area of Belarus with a large population concentration in rural communities.

From the point of view of the state regulation of the demographic processes, two categories of rural communities should be noted: the largest ones, with the population over 1,000 people, and the uninhabited ones. In 2009, there were 302 largest rural communities in Belarus; the biggest number

of them was concentrated in the Brest and Minsk regions, and the smallest – in the Vitebsk and Mogilev regions. Preservation of the demographic potential of these unique settlements and creation of the socio-economic conditions that are necessary for their reproduction is one of the main tasks for the national demographic security.

The shift from the extended to the narrowed population reproduction type led to complete depopulation of rural areas with small communities by population size and which suffered from the accident at the Chernobyl nuclear power station. As of 2009, 1,395 villages (6%) had been deserted, including 42% in the Vitebsk region – the least populated, and 17% in the Gomel region. The smallest number of uninhabited villages is in the Brest and Minsk regions (2.8% and 11%, accordingly). The depopulation of the Belarusian rural communities of this category, while they still remain in the Belarusian rural settlement framework, calls for the solution for the problem of the life-sustaining environment optimisation and rational use of rural territories.

The general spatiotemporal trend of the regional rural settlement structures consists in the following: in 1959 – the prevalence of rural communities with small population in the Vitebsk and Grodno regions, rural communities with medium population size in the Minsk and Mogilev regions, and large rural communities with large population in the Brest and Gomel regions; in 2009 – spatially synchronous shrinkage of all the regional structures – from large, medium and small rural communities by population to medium and small ones.

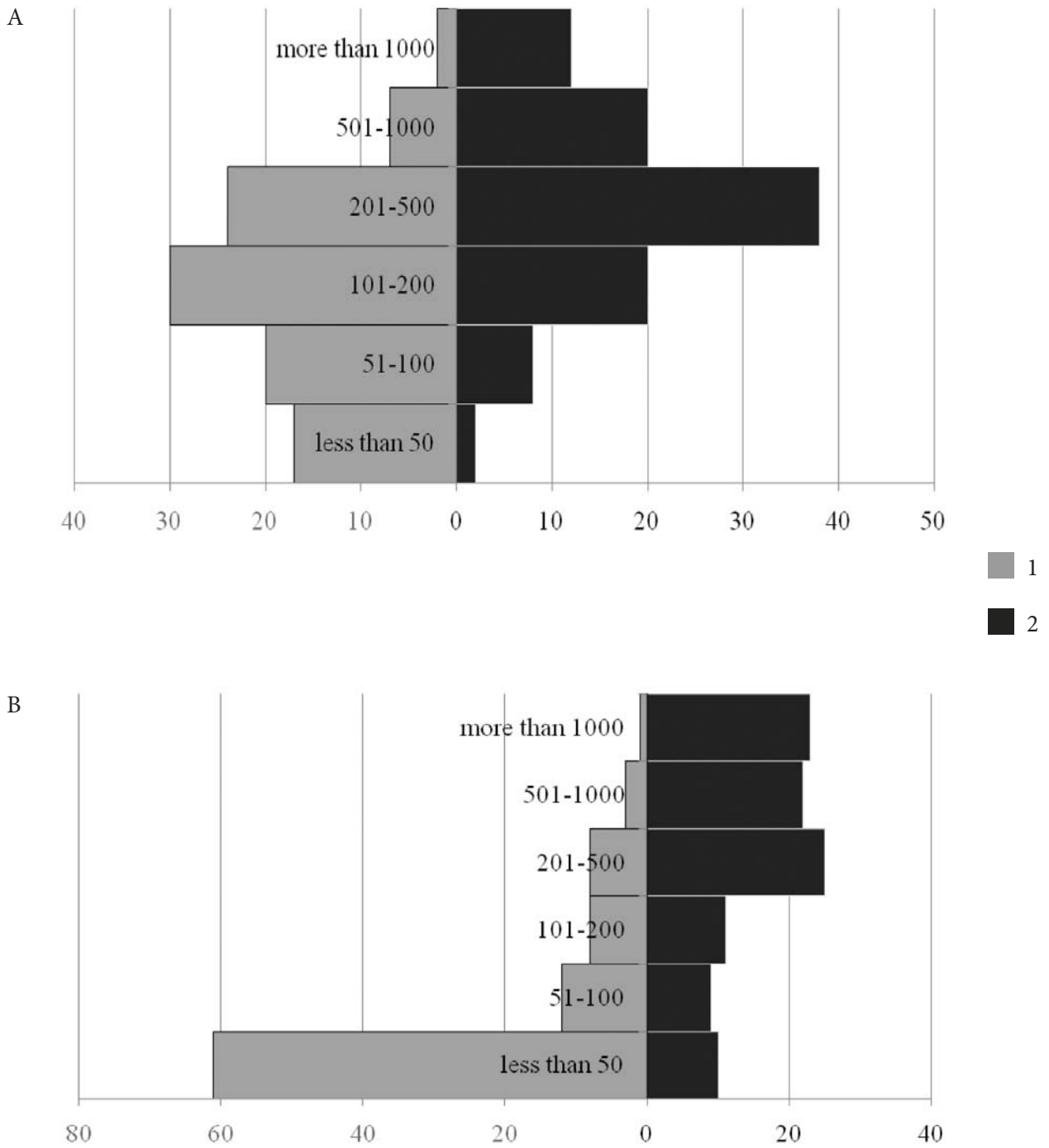


Fig 2. Dynamics of the Belarusian rural settlement structure

Explanation: A – 1959; B – 2009; 1 – share of rural localities in the Belarusian rural settlement structure,%; 2 – share of rural population in the overall Belarusian population,%.

Source: Population census of USSR 1959, Population census of the Republic of Belarus 2009

Under the influence of the demographic factor, a reduction in the population density is seen in Belarusian rural areas. Compared to 1959, when the population density was 26 people per km², by the 2009 it had been reduced three-fold to 12 people per km². The most densely populated territories were the rural areas in the Grodno region (31.6 per km²). The lowest population density was in the Vitebsk region (19.8 per km²), which is about 1.5 times less than the national index (Table 2).

The 1950–1970-s period with its ‘Belarusian urban boom’ and massive rural-urban migration, was the reason for the all-round and spatially proportional decompaction of rural areas – on the average by 8% over the period. Significant parts of rural areas became sparsely populated or almost uninhabited.

At the beginning of the 21st century, the main factors of the rural population decompaction included: migration outflow (rural-urban migration in search of work or education); natural losses of the rural population, accounted for by the transition from the population reproduction mode to the depopulation status and demographic ageing.

By 2009, sparsely populated areas with the density of less than 15 people per km² (92 of 118) dominated in the Vitebsk, Gomel and Mogilev regions. In the northern Belarusian region there were areas where the population density was lower than 5 people per km² (the Gorodok and Rossony districts). In the south of the country — in the territories that suffered from the Chernobyl accident — several extremely sparsely populated districts formed (the Bragin, Narovlyany, Khoiniki districts). The number of densely populated districts (over 20 people per km²) decreased 13-fold over the study period. While there were 91 such districts in the Belarusian territory in the years 1959–1970, in 2009 there are only 7 such districts.

Thus, the Belarusian rural areas that were densely populated in 1959, became sparsely populated, and a relative continuum of demographic space became fragmented in its nature.

In the final stage of the research, the above-mentioned regional differences in the Belarusian rural settlement nature were synthesised, using the

STATISTICA software package and the method of hierarchical cluster analysis of 20 indices, in the result of which 3 types of rural settlement districts were delimited:

1. *Rural communities with large population – Southern*. This type includes large rural communities with large population with an average land burden, average or lower than average decompaction and depopulation rate, and stable settlement structure. It includes 12 Polessie districts in the Gomel region and three Polessie districts in the Brest region (12%). Over the study period, spatial compression of this type took place, which was caused by the shift of large rural communities to the category of medium rural communities as a result of the general trends of the Belarusian rural settlement under the influence of the demographic factor (Antipova, 2008a).
2. *Rural communities with medium population – Central*. This type consists of two subtypes with 35 districts (30%): a) *Central-South*, comprising of the regions with medium rural communities by population size, medium or sparsely populated, primarily the Polessie areas with medium or high land burden, average or higher than average decompaction and depopulation rate; b) *Central-suburban*, including suburban districts with medium rural communities by population size and medium populated, large or extremely large land burden, average or above the average decompaction and depopulation rate.
3. *Rural communities with small population – Northern-Central*. This type includes the smallest and small rural communities by population size, sparsely populated districts with a large land burden, high decompaction and depopulation rate, and comprises of 68 rural districts (58 %), except for the Gomel region. The largest number of this type districts is traditionally confined to the Vitebsk region. This type saw a significant spatial extension in the districts of the Grodno and Mogilev regions that were more severely influenced by the demographic and socio-economic factors. The position of the Minsk region districts remained quite stable (Fig. 3).

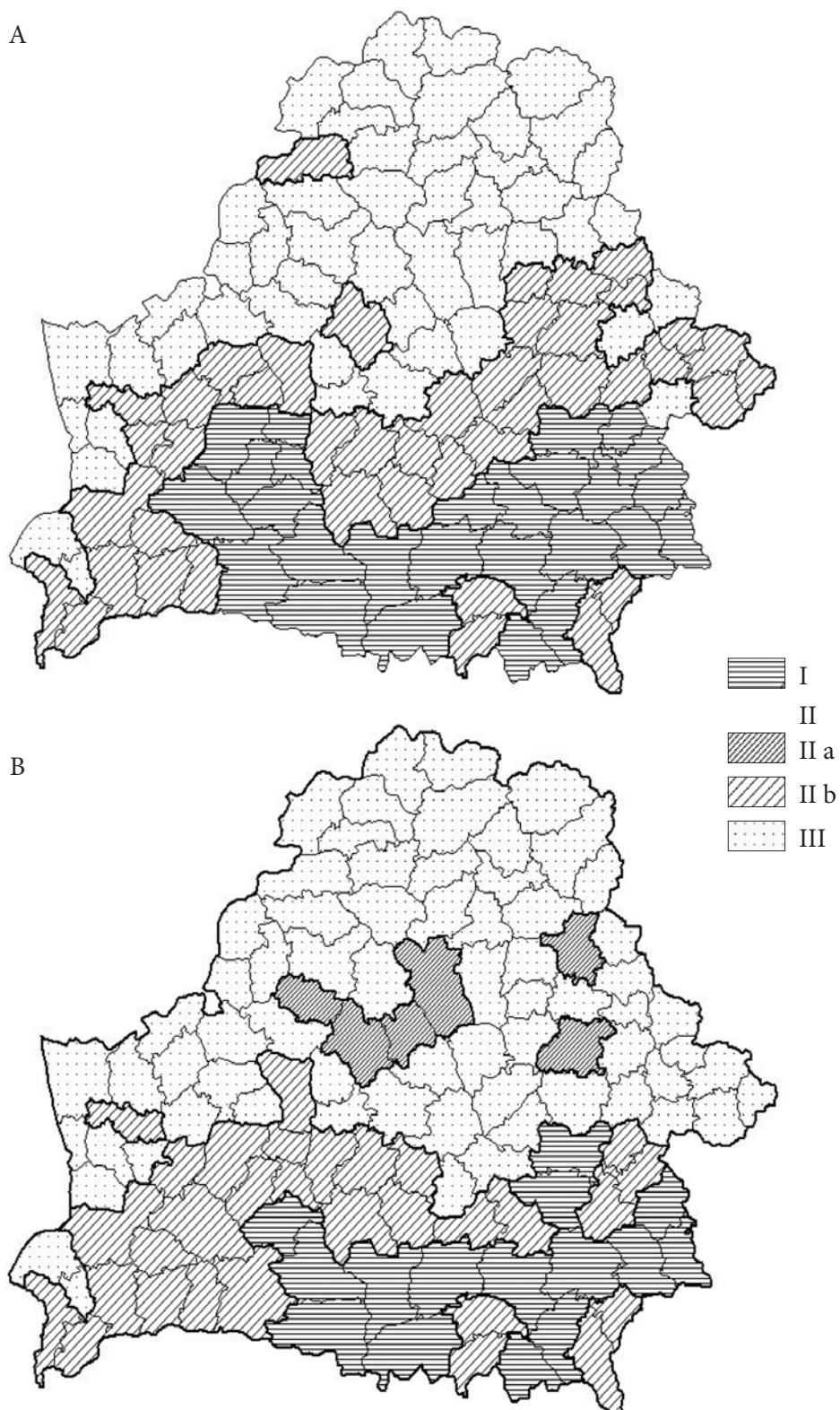


Fig. 3. Belarusian rural settlement types

Explanation: I - Rural communities with large population – Southern; II – Rural communities with medium population – Central; IIa – Central-suburban rural communities with medium population, IIb – Central-South communities with medium population; III –Rural communities with small population – Northern-Central; A – 1959; B – 2009

Source: Population census of USSR 1959, Population census of the Republic of Belarus 2009

The socioeconomic crisis in the Belarusian rural areas at the beginning of the 1990s brought the need for the National Programme for the revival and development of rural areas over the period of 2005–2010. For stable development of rural areas as well as higher motivation for living in such territories, the programme provided for the formation of a quantitatively new settlements – agrotowns, i.e. comfortable rural communities, in which industrial and social infrastructure was to be created to assure the social standards for their dwellers as well as inhabitants of the bordering areas.

Agrotowns were created in the Belarusian rural areas on the basis of the existing administrative-territorial units which are historically established administrative formations, as well as central farmsteads of agricultural organisations. In total, 1,481 agrotowns were created in Belorussia, including 222 in the Brest region, 254 – in the Vitebsk region, 238 – in the Gomel region, 239 – in the Grodno region, 325 – in the Minsk region, and 203 – in the Mogilev region. In the Belarusian rural settlement structure, agrotowns account for 3% of the population; the average population size is 839. The largest agrotowns are concentrated in the south of Belarus, in Polesie (980 people) and in the capital city region (970 people).

The size of rural population living in agrotowns amounts to 542.9 thousand people, i.e. 20% of the Belarusian rural population. The largest population is in agrotowns in the Minsk and Brest regions – 122.2 and 102.9 thousand people accordingly, where on average lives one rural dweller in five. The smallest size of rural population lives in agrotowns of the Vitebsk region – 61.9 thousand people, i.e. 16%.

Belarusian agrotowns show different demographic development potential; this allowed the author to select four types according to the demographic development opportuneness and the source of increase in the demographic potential:

1) *with favourable demographic situation* (1% agrotowns and 3% rural population) – belong to the central capital-city urbanised geodemographic type of rural districts that are situated in the Minsk district. These agrotowns are capable of the independent demographic development by means of the natural increase of local population and migrants;

- 2) *with relatively favourable demographic situation* (41% and 42%, accordingly) – belong to the central (urbanised) demographic type, located primarily in the Southern zone with large rural communities of large population and in the zone influenced by large cities. These agrotowns are capable of self-reliant demographic development, and the natural population increase is expected to be its main source;
- 3) *with conditionally favourable demographic situation* (16% and 25%, accordingly) – belong to rural semi-peripheral demographic type and are located in the southern zone with rural communities of large population, central-western zone with medium and small population rural communities and zone influenced by large cities. These agrotowns are selectively capable of self-reliant development. Agrotowns in the zone influenced by large cities can develop due to decrease in the natural decline, while other agrotowns can develop thanks to attracting young people;
- 4) *with unfavourable demographic situation* (42% and 30%, accordingly) – belong to rural peripheral type and are dispersedly situated in all regions. These agrotowns are incapable of self-reliant demographic development. Migration can be the main reason of demographic potential growth there (Antipova, 2008b).

All in all, in the years to come the nature of the natural population movement and age population structure of the Belarusian rural areas will not change essentially, therefore, on the basis of the strategic goal of their creation, all agrotowns, on condition of socio-demographic and regionally differentiated monitoring, should become the centres of demographic growth in rural areas against the overall development of the Belarusian countryside.

4. Conclusion

The conducted analysis gives ground for a conclusion that the main trends which took place in the spatial structure of the Belarusian rural settlement are concentration and polarisation. Concentration manifested itself in the structural aspect – in the

progressing population centralisation in relatively few (the largest and viable) rural communities with a noticeable increase in the number of settlements of this type, as well as in the territorial aspect, when the focal nature of rural settlements becomes more defined. Structural concentration was the consequence of the polarisation of the settlement landscape that is expressed through the increase in the share of tiny and largest communities by population size and simultaneous decrease in the number of medium population size settlements.

Changes in the nature of the economic and industrial pressure on the territory are becoming one of important consequences of population concentration. On the one hand, well-defined focuses of the anthropogenic impact are formed, on the other hand, inter-central spaces that are less intensively used are delimited. The first variant of changes is found in rural areas close to large cities. Having drawn a significant part of the rural population first, and therefore having served as one of the main reasons for the village neglect, the individual large Belarusian cities in due course will become a source of rural *repopulation*. The second variant of changes is characteristic for a larger number of rural districts, and its most vivid expression is *depopulation* that deformed typical settlement forms and structures, while the intensive migratory outflow was accompanied by the disappearance of a significant part of inhabited areas.

To ensure sustainable development of the Belarusian rural areas, new types of rural settlements – agrotowns – are being formed; in the long term they will have the functions of the core elements of demographic development of the Belarusian rural area.

Thus, in the Belarusian rural settlement system in the 21st century, two distinct traits are observed: abrupt structural changes in average population size of rural communities and territorial dispersion of rural settlements; well-defined spatial differentiation of population density and uniformity of its distribution. These peculiarities of the Belarusian rural settlement deserve close attention for governmental regulation and call for the development of the territorially differentiated measures of spatial optimisation of human environment.

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