

НА ПУТИ К УСТОЙЧИВОМУ РАЗВИТИЮ
СЕЛЬСКИХ ТЕРРИТОРИЙ БЕЛАРУСИ:
ТЕРРИТОРИАЛЬНО-ОРГАНИЗАЦИОННЫЙ АСПЕКТВ. М. ЯЦУХНО¹⁾, С. С. БАЧИЛА¹⁾, Ю. С. ДАВИДОВИЧ¹⁾¹⁾Белорусский государственный университет, пр. Независимости, 4, 220030, г. Минск, Беларусь

Аннотация. На основе результатов выполненного обзора зарубежных и отечественных научных и прикладных исследований сельских территорий анализируются сущность, содержание и оценка многофункциональной роли, которую эти территории обеспечивают для достижения целей устойчивого местного и регионального развития. Особое внимание уделено сельским территориям Беларуси, которые рассматриваются с географических позиций как операционная пространственная основа жизнедеятельности местного населения, ее организации и управления, а также как вмещалище сочетаний природных ресурсов, систем расселения, объектов социального, агрохозяйственного и иных производственных назначений, экологической инфраструктуры, историко-культурных и духовных ценностей. Сделан вывод о том, что ключевыми задачами обеспечения устойчивого развития сельских территорий, отличающихся сложным и многогранным полем взаимодействия общественных и природных компонентов, включая их местоположение, территориальные структуры хозяйства, инфраструктуры и расселения населения, являются научное обоснование и разработка единых специальных территориально-планировочных документов. В качестве аналога таких документов на текущем этапе предложено использовать скоординированные и гармонизированные по задачам сбалансированного развития сельских территорий, разрабатываемые в Беларуси схемы землеустройства и схемы комплексной территориальной организации административных районов Беларуси. Предложены некоторые подходы к их совершенствованию, в частности отражение результатов оценки экосистемных услуг и типологии периферийности сельских территорий. В рамках исследования впервые выполнено с применением ГИС-технологий картографирование и составлена карта сельских территорий Беларуси. Сельские территории выделены на основе показателя соотношения численности и плотности городского и сельского населения, а также времени транспортной доступности их городов. В результате этого определена географическая локализация урбанизированных сельско-городских (переходных) и сельских территорий, удельная площадь которых в республике составляет 7,1; 10,8; 82,1 % соответственно. Предложена система территориально-планировочных решений, способствующих устойчивому использованию сельских территорий республики.

Ключевые слова: сельские территории; устойчивое развитие; многофункциональность; территориальная организация; карта сельских территорий.

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ON THE WAY TO SUSTAINABLE DEVELOPMENT OF RURAL AREAS OF BELARUS: TERRITORIAL AND ORGANISATIONAL ASPECT

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Abstract. Based on the results of the review of foreign and domestic scientific and applied research of rural areas, the article analyses the essence, content and assessment of the multifunctional role that they provide for achieving the goals of sustainable local and regional development. Special attention is paid to the rural territories of Belarus, which are viewed from geographical positions on the one hand as the operational spatial basis of the life of the local population, its organisation and management, on the other hand, as a receptacle of combinations of natural resources, settlement systems, objects of social, agricultural and other industrial purposes, ecological infrastructure, historical, cultural and spiritual values. It is concluded that the key task of ensuring the sustainable development of rural areas, characterised by a complex and multifaceted field of interaction between social and natural components, including their location, territorial structures of economy, infrastructure and population settlement, is the scientific justification and development of unified special territorial planning documents. As their analogue at the current stage, it is proposed to use coordinated and harmonised schemes of land management and schemes of integrated territorial organisation of administrative districts of Belarus, developed in Belarus, in accordance with the tasks of balanced development of rural territories. Some approaches to their improvement are proposed, in particular, the reflection of the results of the assessment of ecosystem services and the typology of the periphery of rural areas. As part of the research, mapping was carried out for the first-time using the GIS software, and a map of rural areas of Belarus was compiled. Indicators of the ratio of the number and density of urban and rural population, the time of transport accessibility of their cities are used as the basis for the allocation of rural territories. As a result, the geographical localisation of urbanised rural-urban (transitional) and rural territories is determined, the specific area of which in the republic is 7.1, 10.8, 82.1 %, respectively. A system of spatial planning solutions is proposed that contribute to the sustainable use of rural areas of the republic.

Keywords: rural territories; sustainable development; multifunctionality; territorial organisation; map of rural territories.

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Introduction

During the last two decades, many foreign countries had noticeably increased the attention and the range of scientific and applied research in the field of assessment of the condition, resource potential, socio-demographic situation, as well as issues of optimising the use and protection of rural areas, aimed at developing practical measures and institutional solutions to ensure their sustainable development [1–13]. It is known that a distinctive feature of rural areas is their geographical location outside urban settlements, the noticeable length and area of the occupied space, the dispersed location of rural settlements, and the low density of their inhabitants. Thus, in Belarus, the area of rural areas occupies over 80.0 %, and the share of the rural population living there is 21.6 %. For example, in the European Union these indicators are slightly lower, amounting to 78.0 and 20.0 %, respectively (according to the European Union information portal (www.eu.europa.eu/farming)).

From a systemic point of view, rural areas should be considered as a complex and heterogeneous territorial social, natural-economic and ecological system, including the social sphere, population and settlement system, industrial and economic complex, components of the natural environment, as well as transport, engineering and environmental infrastructure. Such a polystructural feature of rural areas predetermines its multifunctionality, i. e. performing a wide range of functions: from the production of agricultural products and raw materials to performing environmental and environment-forming functions and preserving spiritual wealth, local traditions and the way of population life. These and other functions of rural areas are presented in details in fig. 1.

Until recently, a utilitarian approach, absolutising the role of agricultural activity in the development of rural areas, characterising and analysing their structural and functional features, prevailed in many countries, including Belarus [7; 15–17]. Without detracting from the key importance of agriculture as a fundamental sector for the development of rural areas, the latter are a source of numerous, in addition to food, other notable benefits and benefits. Therefore, the idea of multifunctionality of rural areas is increasingly being used in defining tasks

and developing practical measures for their sustainable development. In this regard, there has been a need to change the paradigm of rural development and search for its new directions through the maximum use of local resources in rural areas [18; 19]. This involves placing emphasis on territorial rather than industrial (sectoral) development with the involvement of local resources and the expansion of business activities. An example of the successful solution of these tasks is the modern policy of the European Union in the field of rural development.

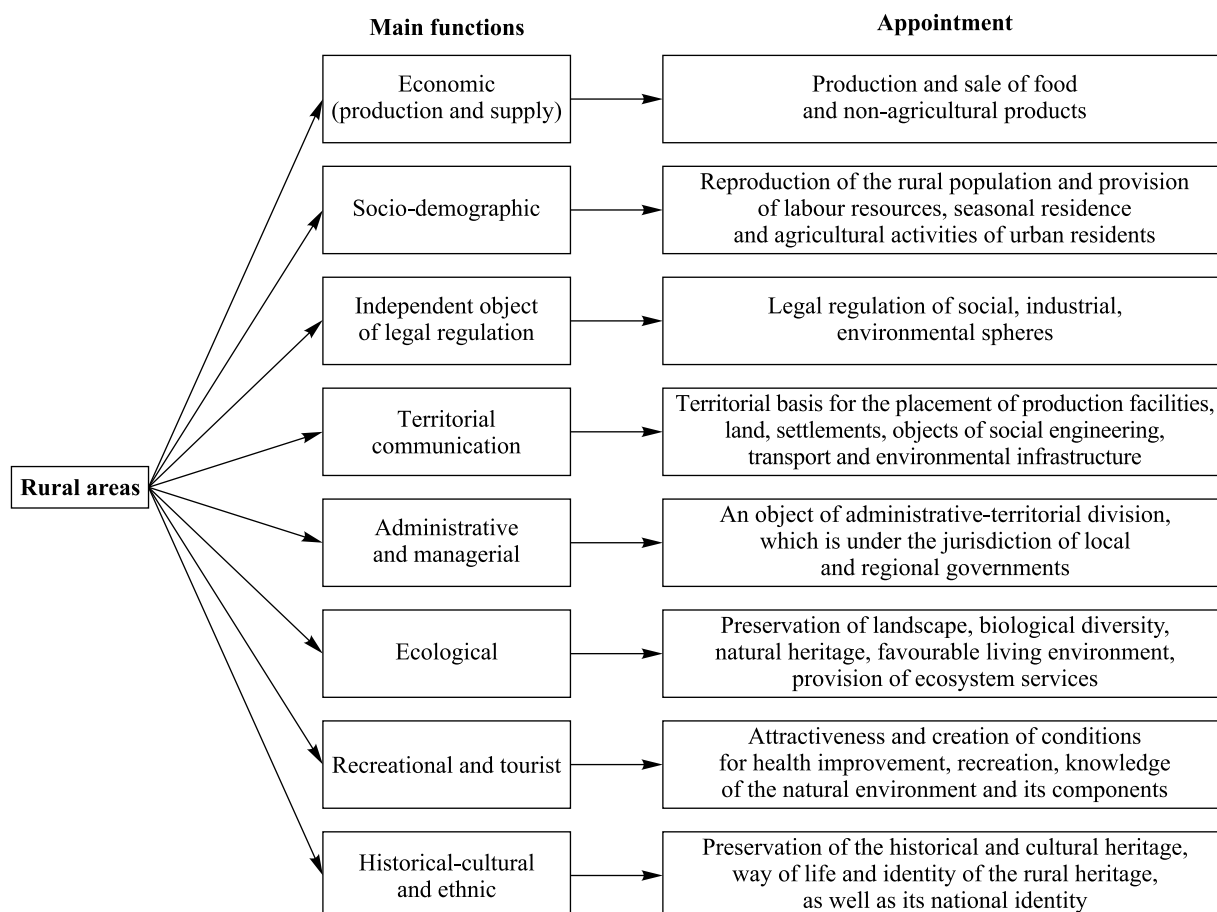


Fig. 1. Multifunctionality of rural areas and the results of its manifestation.

Source: [14]

Within the framework of the European Union common agricultural policy, the following strategic goals are defined:

- increasing the competitiveness of agriculture;
- ensuring sustainable management of natural resources and climate change;
- achieving balanced territorial development of rural economies and communities, including the creation and preservation of jobs;
- protection of the natural environment, compensation of costs for environmental protection measures [11; 14; 20; 21].

The successful implementation of the above goals requires deep, system-oriented scientific research. Many of them can be effectively carried out by representatives of geographical science, and thus, be interdisciplinary in nature. This will eliminate the «narrowly manufactured» nature of the highly specialised study of rural areas and expand the use of different methodological approaches and conceptual apparatus in their study. Taking into account the multifunctional nature of rural areas, aimed at creating and maintaining a living environment, the effective use of environmental potential, ensuring environmental safety, and preserving natural, historical and cultural heritage, geographic planning acts as a management and organisational mechanism for their regulation. In this context, it is understood as a special procedure for territorial organisation with the aim of rational placement and balanced interaction of natural, economic, infrastructure facilities and their spatial combinations for the sustainable development of rural areas [22–32]. Among the promising and poorly developed tasks for achieving it is the assessment and accounting of the results of ecosystem services provided by rural areas. The latter are understood as material and intangible benefits and benefits from the ecosystems located on them (forests, wetlands, soils, meadows, agroecosystems), which, along with economic ones, perform important environmental regulating and environmental functions, i. e. refers to a natural asset that has a certain value [33–35].

Current state of research and some problems of rural development

It is known that rural areas are among the largest components of spatial socio-economic and natural-economic systems, which are characterised by their geographical localisation outside urban settlements, whose residents are mainly employed in agriculture and forestry and in social, transport and industrial infrastructure. One should agree with the statement of a number of studies that cities and their agglomerations emerged from rural areas, but did not separate from it, maintaining many diverse and vital connections that largely determine the sustainable development of such territories [36–40]. One of the most important factors identifying the spatial structure, functioning, specialisation and state of rural areas is their proximity to cities. The latter, being the areas of growth, determine the accelerated development of suburban rural areas, due to a number of mechanisms, including higher transport accessibility, the pull of resources from the near and distant periphery, the spread of innovations, and population migration. The presence of a developed social infrastructure, demand for labour resources, increased levels of wages for workers, etc. [41–43].

The growing impact of urban influence on nearby rural areas leads to the expansion of the spheres of multifunctional use of rural areas, as well as to the rethinking and transformation of the concept of «rurality» as a traditional and environmental value. In the context of this, the typification of rural territories is relevant and practically in demand, considering them not only as a space for the life of rural residents and the traditional form of agricultural production, but also as the processes and results of rural-urban relationships. This principle was successfully used in the implementation of the typology of rural areas of the European Union countries [44; 45]. Population density indicators (in people/km²), as well as the duration of transport accessibility to urban settlements, were used as key indicators for delimiting three types of territories (urbanised, rural-urban and rural territories proper). The application of this approach, taking into account demographic characteristics and settlement systems, can be used in the neighbouring states, including Belarus, which still do not have a similar typology and its multiscale cartographic visualisation.

Recently, foreign countries, as well as Belarus, discuss the paradigm for the long-term development of rural areas, which involve a change in the traditional exogenous system of rural development, based on the use of large-scale government subsidies and preferences. Insolvency and often impossibility of solving numerous problems within the framework of the traditional approach, the introduction was made about the need to switch to the endogenous model, including its neoendogenous version [19; 46–48]. The focus of the implementation of this model is territoriality and the main attention shifts from the dominant role of agricultural activity to the multifunctional development of rural areas, in which, along with the provision of subsidies and preferences, the emphasis is on investment, the expansion of local initiative and entrepreneurship, and the widespread use of natural resource potential. While maintaining agriculture, which will ensure the level of employment and income of rural residents, the scope of other, no less important functions of rural areas is expanded. In addition to the production function, it is necessary to carry out and evaluate their non-production functions (socio-demographic, ecosystem services, preservation of landscapes, way of life and traditions of the local population, historical and cultural heritage, development of tourism, recreation, educational, etc.).

In this regard, there is an increasing need to conduct a scientific substantiation of the above-mentioned spatial localisations and, based on their results, to draw up territorial planning schemes for rural areas – an officially approved document that enshrines the balanced development of their constituent subsystems (economic, social, demographic, environmental and infrastructural).

The development of such schemes should be based on a comprehensive solution to the problems of development of rural areas, maximally adapted to local and natural conditions and a balanced availability of labour, technical, financial and other resources that provide a favourable living environment for the population [24–31; 29; 49–55]. These tasks can be effectively and successfully accomplished using a geographical approach based on the organic and rational combination of natural and social components in the process of planning rural areas. The advantage of this approach towards the multifunctional development of rural areas lies in the ability «to make the fullest use of positional, natural resource, socio-economic, infrastructural and other features and, accordingly, to rationalise the territorial structure of rural areas at different geospatial levels – from local to national» [53, p. 50].

Despite the long-term nature of scientific and practice-oriented discussions and solutions to the problems of rural development, there is still no clear conceptual definition of them, adopted at the legislative level [3; 56–58]. The term «rural area» is often used as a synonym, which requires its conceptual clarification and reflection in the legal system. The differentiation of these concepts and areas of their application is fundamental when adopting targeted programmes for the development of rural regions, identifying targeted scientific research, preparing investment and innovation concepts and strategies, and ensuring effective management of local governments.

In order to differentiate and establish differences in the concepts of rural territories and rural area, it is advisable to use the content of the terms «territory» and «place» established in geographical science and

practice [59–62]. From a geographical point of view, rural areas can be considered, on the one hand, as the operational basis for the life of the rural population and, on the other hand, as part of the earth's surface, serving as a container for a combination of natural resources for production and environment-forming purposes. In addition, rural areas have such a feature as the function of place. In this context, the concept of place is a section of the earth's surface or area, characterised by a geographical location and reflecting the connection between the activities of society and nature, and fixed «in space by social labour in the form of various artificially created objects» [63, p. 118]. It is noted that «a place can carry out many functions, both simultaneously and sequentially» [63, p. 120]. The connection of a place with a rural territory is reflected in the fact that a place is a specific point or area object of such a territory. Therefore, the use of the term «rural area» is justified only in relation to individual places located in rural areas, characterised by a certain qualitative feature – unique functions, rich potential, historical, cultural, natural and recreational value, economic significance, etc. But any combination of them and spatial concentration is designated by the term «rural areas», but is not «rural area». Thus, rural territories are distinguished as territorial entities, in which the life activities of the rural population are carried out and can be considered as an independent legal category, and in the context of sustainable development, as a key object of legal relations [64].

It should be recognised that until nowadays, during the determination of the long-term development of rural areas, the main attention has been paid to the socio-economic, organisational, financial and demographic aspects of their development. However, to increase the efficiency of managing such territories and organising the rational use of their existing resource potential, it is necessary to rely on the results of planning, including territorial planning [22]. The latter determines the measures of spatial organisation of social, economic and environmentally safe development of rural areas, establishes optimal combinations and proportions of functional zones, investment attractiveness, placement, and development of infrastructure facilities, determines the need for land resources, optimisation of rural settlement, improvement of transport development and accessibility, and others [65]. Their localisation and reflection on digital maps of different scales is a mandatory standard for documenting the processes of organisation and development of rural areas.

Research methods and materials

This scientific research incorporates the results of an analytical synthesis of a wide range of national and international published works on the structural, functional and natural-economic features of rural areas, as well as on the assessment of the current state and prospects for their sustainable use. As a key direction for studying and determining the balanced development of rural areas, it is proposed to use a geographical approach in which they are considered as polystructural and multifunctional spatial compositional combinations of natural, socio-economic, economic and infrastructural objects, predetermined, along with geographic environmental conditions, geodemographic factors and processes, the life activities of local residents, their traditions, ethnic characteristics, the presence and preservation of historical and cultural heritage, etc. [66; 67].

Along with the geographical approach and analytical synthesis of data, the work widely used methods of comparative, functional analysis, expert assessments, statistical analysis, as well as systematisation techniques. Particular emphasis was on the cartographic method, which made it possible to justify and compile a nationwide map of rural areas of Belarus and develop an explanatory legend for it. The size of the rural population density (number of inhabitants per 1 km²) and the indicator of hourly transport accessibility to cities, characterising their remoteness or proximity to rural settlements, were used as indicators that differentiated the allocation of urbanised, rural-urban (transitional) and rural territories themselves. To reflect the continuity and formation of the focality of the rural settlement of the republic, a dasymetric method was used, which, in contrast to cartograms of population density by administrative-territorial units, allows us to identify areas of concentration and sparse population depending on the distance from a rural or urban settlement [68]. This method was recently successfully tested by Belarusian researchers when assessing changes in rural settlement in Belarus during the period between the population census (2009–2019) [69], the results of which were used to delimit the above-mentioned territories.

Data from state statistics, the Geoportal of the Land Information System of the Republic of Belarus, and information from a number of international organisations published in international and national sources were also used as source material for the research.

Main results and their discussions

Belarus traditionally pursues a policy of priority development of agriculture and the agro-industrial complex, aimed at supporting agricultural producers and the socio-economic development of rural areas as the most important goal of public administration. At the same time, the main emphasis is on the absolute development of agriculture, taking into account the existing resource potential of the agro-industrial complex and on the provision of government subsidies, preferences, and benefits.

By now, there has been an understanding that rural areas have, along with natural and human, rich cultural, social, recreational and resource potential, which gives them a multifunctional character. In this regard, rural territories act as an independent socio-territorial system and are the object of organisation and management of not only agrarian, but socio-demographic, housing, labour, production, communication, environmental protection spheres, etc. This postulate was first laid down during the development and adoption of the State Programme for Rural Revival and Development for 2005–2010, approved by Decree of the President of the Republic of Belarus of 25 March 2005 No. 150. This programme was aimed at achieving the following goals:

- sustainable socio-economic development of rural areas, contributing to the formation of the necessary conditions for the livelihoods of the population, making the rural way of life and work attractive and achieving established social standards;
- the formation of micro- and macroeconomic management systems in market conditions that ensure the development and consistent increase in the efficiency of agro-industrial production;
- ensuring national food security and increasing the export potential of the agricultural sector;
- the formation of 1481 agricultural towns on the basis of rural councils and central estates of agricultural organisations [7].

Thanks to the adoption in the last two decades of the above programme and other regulations in the field of socio-economic development of the agricultural sector and rural regions, the share of agriculture in GDP will remain 6–7 %, and its share in product exports has reached 9 %, which ensured food security and food self-sufficiency in the country. At the same time, a number of problems that hinder the revival and sustainable development of rural areas still remain unresolved. Among them, the most important is the ongoing demonstration of negative geodemographic processes caused by a general reduction in the rural population, i. e. strengthening the processes of its depopulation, increasing the rate of change in the territorial structure of rural settlement in Belarus [70]. The current state of its indicators is illustrated in table 1.

Table 1

Rural population and the structure of its settlement by regions of Belarus as of 1 January 2023

Region	Rural population, thsd people	Share of rural population, %	Total number of rural settlement, units	Number of rural settlements by category, units				Average area rural settlement, ha	Average population of rural settlement, people	Rural population density, people/km ²	Number of rural settlement without population, units
				Agricultural towns	Villages	Small villages	Farms				
Brest	370.0	19	2148	214	1883	25	26	106.5	172	11.2	75
Viciebsk	235.3	12	6183	245	5542	39	357	34.8	38	7.4	1079
Gomel	299.8	15	2249	230	1481	532	6	53.2	133	7.4	157
Grodna	229.7	11	4292	226	3675	9	382	34.1	54	9.2	395
Minsk	661.5	33	5175	307	4581	253	34	42.8	128	16.6	292
Magiliow	191.9	10	2962	204	2502	248	8	47.7	65	6.6	325
<i>Belarus</i>	<i>1988.2</i>	<i>100</i>	<i>23 009</i>	<i>1426</i>	<i>19 664</i>	<i>1106</i>	<i>813</i>	<i>46.6</i>	<i>86</i>	<i>9.5</i>	<i>2323</i>

Compared to the 2009 census data, the number of rural residents decreased by 16 %, the number of rural settlements by 458 units, and their average population decreased from 103 to 86 people. The exception was the Minsk region, where this figure increased from 122 to 128 people. In general, this led to a decrease in the density of the rural population from 12.0 people/km² in 2009 to 9.5 people/km² in 2023. As a result of the above, the territorial pattern of the rural settlement system acquired a pronounced focal character due to, on the one hand, the growth of zones of concentration of the rural population, as a rule, around medium-sized and large cities, on the other hand, the expansion of territories with a low density of rural population and the lack of residents in the former rural settlements, the number of which exceeds 2.5 thsd units.

According to the Unified Register of Administrative-Territorial and Territorial Units of the Republic of Belarus, rural settlements are divided into 4 categories: agricultural towns, villages, urban-type settlements and farmsteads, the share of which in their total number is 6.2, 85.4, 4.8, 3.6, respectively. A sharp decline in population or its absence in rural areas leads to increased processes of peripheralisation of agricultural land use, leading to an increase in intraregional territorial differentiation of agricultural production, which negatively affects its efficiency [71].

Despite the awareness of the importance and need for new approaches to the assessment, use and development prospects of rural areas, currently considered not only from the standpoint of the agro-industrial sphere, but also

as socio-economic, natural, cultural subsystems and multifunctional purposes, in Belarus there is no information about geographical boundaries and spatial localisation of such territories, supported by thematic maps.

To identify and map rural areas, the experience of their typology developed by the Organisation for Economic Cooperation and Development in relation to the states of the European Union is very constructive and useful [72]. According to the proposed typology, rural, rural-urban (transitional) and urbanised territories are distinguished. The indicators that delimit these territories are population density (in people/km²), the proportion of the population living in rural areas and the presence of population in urban settlements (in thsd people). Rural areas include areas with a population density of 150 people/km², and the proportion of the population living in rural communities is more than 50 % and does not have an urban population. Rural-urban (transitional) territories are characterised by a population density of more than 151 people/km², and the share of the population in rural communities is 15–50 %, respectively. Urbanised areas are represented by urban settlements with a population of more than 200 thsd people, and adjacent rural communities, where the share of the rural population is less than 15 %.

We used the proposed methodological approach to identify the types of such territories in Belarus, taking into account the differences in absolute geodemographic data and settlement systems in comparison with the countries of the European Union (table 2).

Table 2

Typology of rural, rural-urban and urbanised territories of Belarus and their indicators

Territory type	Population density, people/km ²	Proportion of population living in rural areas, %	The population living in the urban centre, thsd people
Rural	Less than 15	More than 50	Less than 20
Rural-urban (transitional)	15–35	Less than 50	More than 20
Urbanised	More than 35	Less than 15	More than 50

A certain difficulty is caused by the identification of rural-urban (transitional) territories, which «essentially merge together on the basis of stable and daily labour, household, trade, cultural, recreational and other types of connections» [73, p. 57], forming peculiar continuums. Based on this, it was recently proposed to identify 200 rural-urban continuums of this kind on the territory of Belarus [74]. However, its author rightly notes that in most of the continuums small urban settlements predominate, which do not differ significantly in their social standards, infrastructure, lifestyle and employment from rural settlements. Only for urban settlements exceeding 20.0 thsd population are the primary processes of agglomeration and the formation of a suburban zone, including neighbouring rural settlements, which establish rural-urban (transitional) territories, noted. As a result of the research carried out and the scientific results obtained, for the first time, a nationwide map (see fig. 2) was compiled, which shows the distribution areas and geographic localisation of rural, rural-urban and urbanised territories, the share of which in the total area of the republic is 82.1, 10.8 and 7.1 %, respectively.

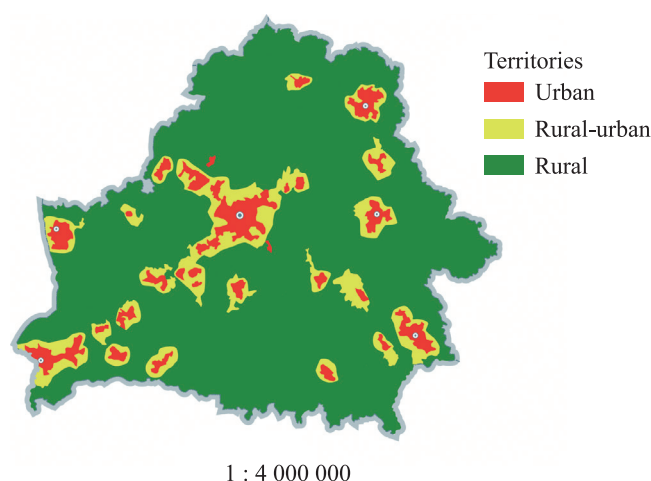


Fig. 2. Rural, rural-urban and urban areas of Belarus

As follows from the contents of the map, rural areas occupy a dominant place in the geographical space of the republic, characterised by a noticeable extent and low population density. Urbanised areas and adjacent

rural-urban areas gravitate towards large, medium-sized and, less often, small cities, geographically confined to major transport routes of international importance.

Recently, in Belarus and in countries near and far abroad, great importance has been attached to the balanced use of rural areas in the framework of achieving sustainable development goals. In this case, the main emphasis is on solving socio-economic, organisational and financial problems, diversification and stimulation of economic activity, institutional transformations, etc. [5; 16; 17; 75; 76]. However, with the transition from the previously dominant sectoral approach to sustainable development of rural areas, based on an assessment of the provision of basic resources for agricultural production to a territorial approach, the functions of such territories change dramatically. They are considered not only as a geographical space that has a certain natural, resource, and labour potential not only for agriculture, but also for the expansion of many non-agricultural types of production activities (recreational and tourism services, implementation of measures for the care and protection of landscapes, conservation of natural and cultural heritage, etc.). The emergence of new forms of management and expansion of the functions of rural areas will require an increased role and strengthening of the coordination mechanism between business entities, the rural population, and existing local governments.

The most important tool for the practical implementation of such a policy is spatial planning. It is understood as the process of substantiating, developing and proposing a system of measures of organisational-territorial, economic, social, environmental, legal and other nature, aimed at improving the territorial organisation of states, regions, administrative-territorial and territorial units, including rural areas [29; 49; 51–58; 77].

The demand for spatial planning of rural areas lies in taking into account the results of sectoral and inter-sectoral development programmes, as well as complexity in assessing their resource capabilities, social needs of the local population and environmental limitations. As is known, in Belarus there is no unified legislative system of spatial planning. The latter is carried out within the framework of urban and land management planning, regulated respectively by the Law of the Republic of Belarus «On architectural, urban planning and construction activities» and the Land Code of the Republic of Belarus. The main targets and output planning documents of these types of territorial planning are reflected in table 3.

Table 3

Hierarchical system of the main types of spatial planning in Belarus

Planning levels	Urban planning	Land planning	Landscape planning	Scales of planning maps
National	State scheme of complex territorial organisation of Belarus	General scheme for the use and protection of land resources of Belarus	Landscape programme	1 : 1 000 000, 1 : 400 000
Regional	Scheme of the integrated territorial organisation of the region, general plan of the city of Minsk, documentation for the zone of special state regulation	Regional land management scheme, regional land management scheme (use and protection of land resources), land management scheme of a specially protected natural area, zones of special state regulation	Landscaping frame programme	1 : 200 000, 1 : 50 000
Local	Scheme of the integrated territorial organisation of a district, village council (possoviet), general plan of a city, rural settlement, documentation for a zone of special state regulation	Land management scheme for a district, village council (possoviet), land management scheme for a specially protected natural area, zones of special state regulation, inter-farm land management project	Landscape plan	1 : 50 000, 1 : 10 000
Detailed	Urban development projects of detailed planning	On-farm land management project, project for the organisation and arrangement of territories of peasant (farm) farms, gardening partnerships, settlements, work projects for the reclamation of disturbed lands, protection of soils from erosion and other negative processes, improvement of agricultural lands, increasing soil fertility	Landscape architectural planning and landscaping projects	1 : 10 000, 1 : 1 000

Source: [78].

In relation to rural areas, the above types of spatial planning play a complementary role. If in urban planning the main attention is paid to the functional planning organisation of rural regions, the state, and prospects for the development of settlement systems, the placement of infrastructure facilities and ensuring environmental protection, then in land management planning attention is paid to the use, redistribution and protection of land resources, their environmental and economic assessment, environmental land use restrictions¹.

It should be recognised that during the development of spatial planning measures in rural regions, natural conditions and resources are often considered from a purely utilitarian-pragmatic position from the point of view of their maximum involvement in various types of economical use. At the same time, their environmental and environmental functions and the ecosystem services they provide are ignored. This allows us to exclude landscape planning, which is actively used in many foreign countries and is under development in Belarus [79–83]. In this context, landscape planning acts as an independent spatial planning process, which, under certain conditions and based on the assigned tasks, can be integrated with spatial planning. Some provisions of landscape planning, primarily related to nature conservation and the functional use of landscapes, are included in territorial development projects and acquire a mandatory legal nature during their implementation.

The main methodological techniques of landscape planning for the purposes of agricultural land use are: analysis of the landscape structure of land use, assessment of the potential resistance of landscapes to agricultural impacts, assessment of agricultural and economic potential and functional-ecological zoning of landscapes. In the process of landscape planning, an ecological and technological grouping of agricultural lands is developed and the effectiveness of their use and protection is determined (including the formation of working areas, crop rotation fields, placement of engineering, social and environmental infrastructure facilities, etc.).

Conclusions

In contemporary conditions in Belarus, the use of new approaches and assessment of the place, role, and directions of sustainable development of rural areas, ensuring the socio-economic, food and environmental security of the republic, is becoming increasingly relevant and in demand. In a strategic plan, they are considered not only as an agro-industrial sphere of activity, but also as a territorial system that performs a wide range of vital functions (social, demographic, cultural, recreational, environmental, resource, etc.).

During the transition from narrow sectoral (agrarian) to multifunctional use of rural areas, it is necessary to use an interdisciplinary approach to their study and the development of methodological recommendations for optimising the spatial location and interaction of their individual economic, infrastructure and environmental facilities. A key coordinating role in this can be played by geographical specialists who have the knowledge and skills of territorial organisation of rural regions, the implementation of which determines the effective and rational use of the resource potential of rural areas, prospects for their socio-economic and environmental development, as well as measures of prevention contradictions and conflicts in nature management.

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¹Инструкция о порядке разработки схем землеустройства районов [Электронный ресурс] : постановление Гос. ком. по имуществу Респ. Беларусь, 28 нояб. 2022 г., № 38 / Нац. правовой интернет-портал Респ. Беларусь. URL: <https://pravo.by/document/?guid=12551&p0=W22239157> (дата обращения: 15.08.2024).

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