DOI: 10.15838/esc.2021.1.73.7 UDC 332.1 (470.2), LBC 65.050.23 (2Ros-12) © Voroshilov N.V.

Assessing the Socio-Economic Potential of Rural Territories*



Nikolai V. VOROSHILOV Vologda Research Center of the Russian Academy of Sciences Vologda, Russian Federation e-mail: niks789@yandex.ru ORCID: 0000-0002-5565-1906; ResearcherID: I-8233-2016

Abstract. Currently, the relevance of the research of trends and potential for rural territory development is primarily caused by increased attention of scientists and public authorities to spatial topics. In 2019, the Spatial Development Strategy of the Russian Federation for the period up to 2025 and the new State Program of the Russian Federation "Integrated Rural Development" were adopted. In this regard, the article's aim is to develop a methodological approach to assessing the socio-economic potential of rural territories and, based on its approbation, to determine priority areas for ensuring their integrated and sustainable development. To achieve this goal, the authors use such scientific methods as economic, statistical, and comparative analysis, methods of generalization, analysis, synthesis, as well as the monographic method. The scientific novelty of the research is the proposed method of socio-economic potential measurement (with scoring) of rural territories. This method makes it possible to classify them by the level of potential development to justify the priorities of regional and local socio-economic policies for different types of territories. The authors have drawn the following conclusions: key development problems of rural territories of Russia, and Russian North in particular, are unfavorable demographic conditions; a low level of accomplished housing with all kinds of amenities (the national average is that only a third of the Fund is improved); a high share of population (for example, 40% of the Nenets Autonomous Okrug, and 45% of the Vologda Oblast) that is provided with poor-quality drinking water; a noticeable lag of rural population's income in comparison with urban citizens' incomes. Moreover, most municipal districts of the Vologda Oblast (14 out of 26) are characterized by the average potential level

^{*} The reported article was supported by the Presidential grant no. MK-2019.2020.6 "Managing integrated socio-economic development of the northern rural territories within the implementation of the state policy on regional development".

For citation: Voroshilov N.V. Assessing the socio-economic potential of rural territories. *Economic and Social Changes: Facts, Trends, Forecast*, 2021, vol. 14, no. 1, pp. 91–109. DOI: 10.15838/esc.2021.1.73.7

of their rural territories. The materials of the article can be used by the authorities and serve as a basis for further scientific research on this topic.

Key words: rural territories, socio-economic potential, assessment methodology, Russian Federation, Russian North.

Introduction

Rural territories (areas outside urban territories) occupy most of the Russian territory. Performing a number of national economic functions (ensuring food security, preserving the space connectivity, historical and cultural legacy, maintaining ecological balance, creating conditions for the restoration of population's health and recreation, etc.), they play an important role in the Russia's spatial development. At the same time, the rural territory development has accumulated a lot of complex and systemic problems among which we should particularly note a significant decline in the rural population in the majority of Russia's entities, a noticeable lag of rural population's living standards behind citizens' conditions, persistent low level of housing improvement, a low level of social infrastructure development, disruption of production activities, etc. To solve these problems and tasks in Russia, the authorities have adopted special state programs since the 2000s: Federal Target Program "Social Development of Rural Areas through to 2013" (Resolution of the Government of the Russian Federation no. 858, dated December 03, 2002,); Federal Target Program "Sustainable Development of Rural Areas for 2014-2017 and until 2020" (Resolution of the Government of the Russian Federation no. 598, dated July 15, 2013,); State Program of the Russian Federation "Complex Development of Rural Areas" with the 2020–2025 implementation period (Resolution of the Government of the Russian Federation no. 696, dated May 31, 2019). Also, there was the approved "Strategy for Sustainable Development of Rural Areas of the Russian Federation through to 2030" (Resolution of the Government of the Russian Federation no. 151-r, dated February 2, 2015).

However, in practice, it was not possible to significantly improve the situation with rural territories everywhere due to the lack of comprehensive, systemic government programs, limited by their focus (until 2019, rural territories were considered only within the rural settlements framework and with reference to agricultural production) together with the apparent lack of their financing.

In the State Program "Integrated Development of Rural Areas" (approved by the Resolution of the Government of the Russian Federation no. 696, dated May 31, 2019), rural territories are understood as: 1) a rural settlement, or rural settlements, and inter-settlement territories sharing a common territory within the municipal district borders; 2) rural communities included in the urban settlements, municipal districts, urban districts (except for urban districts, where there are the administrative centers of the constituent entities of the Russian Federation); 3) rural communities included in the inner-city municipalities of Sevastopol; 4) workers' settlements, given the status of urban settlements; 5) workers' settlements included in the urban settlements, municipal districts, and urban districts (except for urban districts, where there are the administrative centers of the constituent entities of the Russian Federation). We also use this definition in our work.

Spatial Development Strategy of the Russian Federation until 2025 (approved by the Decree of the Government of the Russian Federation no. 207-r, dated February 13, 2019) shows the solution of the problem related to the settlement system stability due to the socio-economic development of rural territories (taking into account population density,

different nature of reclamation and usage of such territories, natural conditions, remoteness from big cities). The plan is:

- to improve population's living conditions in rural territories including sustainable reduction in the share of uninhabitable housing stock, increasing the level of rural settlements' improvement, the utility infrastructure provision; to enhance transport accessibility to the nearest inter-municipal service centers through the development and enforcement of the standards of regional and local roads, public transport promotion;
- to promote the development of small and medium towns and large rural settlements as intermunicipal service centers for rural territories providing the population and entrepreneurs with various types of services;
- to improve the competitiveness of their economies by promoting unique local brands, promoting the development of consumer, credit and other forms of cooperation, farming, increasing the availability of agricultural markets for small and medium producers, supporting the development of specialized infrastructure for storing agricultural products, introducing technologies and equipment for deep processing of agricultural raw materials, and promoting the development of land reclamation facilities, involvement in the agricultural turnover of unused land and arable land in rural territories suitable for conducting effective agriculture;
- to contribute to the employment diversification and expanding support for population's initiatives in the field of entrepreneurship, not related to agriculture; to promote the development of tourist and supporting infrastructure (transport, energy, utilities, objects of the territory's engineering protection) in rural territories and promoting their tourist resources in the domestic and international tourist markets, etc.

It is worth recognizing that these goals and tasks are quite correct, but complex at the same time. Their solution will require scientific justification for improving the mechanisms and tools for rural development.

The countries of the European Union carry out rural development at the supranational level within the framework of the EU Common Agricultural Policy (CAP): rural development policy is its integral part. It is funded by the European Agricultural Guarantee Fund (EAGF; in 2021-2027 the funding amount is 291.1 billion euros) and the European Agricultural Fund for Rural Development (EAFRD; in 2021–2027 – 95.5 billion euros). There is also the European Network for Rural Development (ENRD) – an association that brings together all stakeholders and aims to achieve improved rural development outcomes. One of the key technologies in the projects' implementation in the field of rural development is the project "LEADER". It is a local development method for involving local actors in the formation and implementation of strategies, decision-making, and resource allocation for the development of their rural territories [1-3].

Many foreign [4–9] and Russian [10–21] scientists study the issues of assessing the potential, trends, and prospects of rural development. For instance, the paper [4] emphasizes that the conditions for the sustainable development of rural territories in the modern knowledge-based economy are: 1) the development of new economic activities that can meet the potential urban demand; 2) local entrepreneurship that can create and expand new activities; 3) social capital that can support entrepreneurship in new fields of activity with access to credit, labor, human capital, external markets, and external knowledge for learning and innovation.

Sustainable development of any territorial entities is possible only with the effective use of available development resources and sources. The most important of them are natural and labor resources, production facilities, infrastructure, and financial resources that make up the territory's potential [11]. Accordingly, in order to understand

the prospects for the territories' development and determine the priorities and tools of state and local socio-economic policy, it is important to objectively assess the existing potential, which implies the resources that will provide the basis for the rural territories' long term development, as well as to identify the problematic aspects of this potential that hinder sustainable and progressive development.

In a broad sense, the word "potential" (from Latin *potentia* – power, opportunity) means a set of resources and conditions necessary for conducting, maintaining, and preserving something [22].

According to A.N. Syrov's opinion, the economic potential of the territory's sustainable development is determined by its geopolitical position, natural resources, means of production, demographic and labor resources, the state of the socio-cultural sphere, and the possibilities of using and attracting financial support. The main task of assessing the economic potential is to identify the main sources of self-development [23].

O.S. Rusinova [24] understands the resource potential of the socio-economic development of a municipality as a set of factors that form the basis for the functioning and development of the territorial socio-economic system.

By the potential of a municipal formation, A.B. Grachev [25] means a set of natural and social opportunities that determine the development or limit it, leading to the stagnation of the municipal formation. Thus, the author notes the need to analyze not only the development sources, but also the factors that hinder it.

T.G. Krasnova and E.A. Balabanova [26] propose to define the municipality's socio-economic potential as identified resource opportunities for socio-economic development which should maximally meet the needs of a local community and bring a municipality to a completely new level of competitiveness.

A.B. Martynushkin [27] identifies many components of the economic potential at the rural territories' level. The management potential, production, labor, innovation, investment, financial, social, natural-climatic, geographical, and landscape potentials are the most significant ones.

Under the production potential, the authors of the monograph [28] understand the system of economic relations that arise between economic entities about obtaining the maximum possible production result with the most effective use of production resources, with the existing state of the art and technology, advanced forms of production organization.

In this research, the socio-economic potential of rural territories is understood as a set of resources and factors that allow rural territories (area outside urban territories) to develop sustainably, effectively use the available resources and opportunities which ultimately lead to an increase in the level of their socio-economic development and living standards of rural population. At the same time, it is necessary to note that most methods and tools are devoted to the socio-economic potential assessment (development potential, etc.) of regions (entities of the Russian Federation) or municipalities (usually districts and urban districts). The authors do not reveal the specifics and features of rural territories' potential.

Thus, the relevance of the research is caused by the imperfection of existing scientific approaches and the mechanism for assessing the potential of rural territories. Accordingly, from a scientific point of view, it is important to develop a methodological approach to assess the rural territories' potential and to determine priority areas for ensuring their integrated and sustainable development, based on its testing (for example, in the Vologda Oblast). It is the purpose of our article.

Research methodology description and its choice justification

The results of a comparative analysis of existing methods and methodological tools for assessing the rural territories' potential in Russia (for example, [29–35]) indicate their significant variety, both in essence and in content. In general, we can distinguish the following approaches to assessing the rural territories' potential: strategic (usage in the strategies' creation for the development of regions and municipalities and implementation in the form of SWOT analysis and other methods); resource (evaluation of individual resource types, territories' development factors); marketing (determination of the territories' competitive advantages); and cost (using various methods, the cost assessment of various types of the territory's resources, such as forest resources, wildlife resources, etc., is conducted).

The main methods of assessing the territories' potential (including rural ones) are the following: assessment of its individual components (types, for example, natural resource potential, production potential using the analysis of indicators that characterize it); economic and mathematical modeling (the degree estimation of influence of individual resources and factors on the parameters of territorial development); methods of expert assessments (experts usage of a point scale or other techniques to assess certain resources, conditions, and factors of territorial development); score estimates (values of the corresponding indicators of the potential assessment are assigned an appropriate score based on the reference values or comparison with other territories); calculation of the integral indicator (using various methods, the integral indicator of the assessment of socio-economic potential is calculated).

The analysis proves that there are a lot of methods. However, since science and practice have no unified approach to understanding the socioeconomic potential of rural territories, it does not allow conducting its quantitative and qualitative assessment: including a dynamic assessment and an evaluation of different entities of the Russian Federation. Also, several methods have problems regarding inaccessibility to statistical and other information bases for calculating the potential in dynamics, with the need to distinguish between the assessment of the potential of "rural" municipalities and the assessment of the potential of rural territories or municipal districts' rural territories, urban districts, the complexity of interpreting the results of such an assessment, etc. This makes it necessary to create our own methodology for assessing the potential, taking into account the specifics, functions, factors of rural development, the availability of development resources, and orientation toward the problems of the Russian countryside.

A comprehensive assessment of socio-economic potential of rural territories suggests that there is the existence of a reasonable and scientifically validated system of indicators; statistical capacity; justification of the target indicators as benchmarks or the definition of the boundaries of the indicator values in order to distinguish different groups of territories according to their capability level.

When developing a methodology for assessing the rural territories' potential, it is worth taking into account the following points:

- 1. Rosstat has been publishing the statistical collection "Rural Territories of the Russian Federation" since 2014. It provides generalized information on the rural territories' development of each entity of the Russian Federation on a number of indicators grouped into blocks (health, sports, tourism, trade, services, communications, investment, housing construction, and housing conditions).
- 2. For municipal districts and urban districts, in the context of rural and urban territories of s corresponding district (okrug), official statistics publish information that reflects only some

demographic indicators and indicators of the development of engineering (municipal) infrastructure.

3. It is not entirely correct to assess the rural territories' potential only for rural settlements, because, in the conditions of the municipal-territorial structure that has developed in the entities of the Russian Federation, rural territories also occupy a large part of a territory in a number of urban and municipal districts, urban settlements. However, statistics on rural settlements are very limited both in terms of the composition of indicators and their timely and complete filling in relevant official statistical databases.

In this regard, we consider it possible to assess the socio-economic potential of rural territories of entities of the Russian Federation on the basis of statistical data on municipal districts, municipal districts and urban districts (share of rural population in such urban districts should be at least 10% of a municipality's total population, and a territory's area — at least a third of an average area of municipal districts, municipal and urban districts of a corresponding entity of the Russian Federation). In the Vologda Oblast, all 26 municipal districts fit these criteria.

The methodology for assessing the socioeconomic potential of rural territories should meet the following requirements: 1) indicators used to assess the potential should reflect the specifics of rural territories (the basis for the most rural territories' development are agro-industrial and forestry complexes, among medical organizations, paramedic and midwife stations predominate, etc.); 2) availability of initial data for calculations, ability to perform similar calculations for any entity of the Russian Federation; 3) ease of calculations and simplicity of interpretation of the results which allows applying the methodology for further substantiating the directions of potential development and improving the efficiency of its use. Accordingly, we will describe our own methodology that meets the specified requirements and "circumvents" existing limitations in the statistical database.

The algorithm of the proposed method of scoring the socio-economic potential of rural territories consists of several stages.

Stage 1. Determination of a list of indicators that characterize various types of socio-economic potential of rural territories (*Tab. 1*).

Stage 2. A value of each of 34 indicators for assessing socio-economic potential is assigned a point score (Ip) in accordance with the following boundaries of the indicator range (Tab. 2).

Table 1. Indicators for assessing the socio-economic potential of rural territories (municipal districts)

| Type of potential | Assessment indicators |
|----------------------|--|
| Natural resource | 1. Total stock of the main forest-forming species (+), thou. cu. m. per 1 sq. km of a municipality's territory 2. Reserves of sand and gravel materials and sands (+),thou. cu. m. per 1 sq. km of a territory |
| potential | 3. Fresh water reserves (+), cu. m. per day. on 1 sq. km of a territory 4. Share of an agricultural land area in a total area of a district (+), % |
| Production potential | 1. Share of usage of estimated cutting area (+), % 2. Cultivated area in all categories of farms per 1000 square kilometers of a territory (+), hectare 3. Number of cattle in farms of all categories per 1000 inhabitants (+), heads 4. Number of individual entrepreneurs per 1000 residents (+), units 5. Degree of depreciation of fixed assets at the end of a year (-), % 6. Renewal coefficient of fixed assets (+), % |
| Labor potential | Share of working population in a total population size (+), % Officially registered unemployment level (-), % Labor market tension coefficient (-) (load of unemployed population per one declared vacancy), times Students' number in general education institutions per 1000 people (+), people |

Source: own calculations.

End of Table 1

| Type of potential | Assessment indicators |
|--------------------------------------|---|
| Financial potential | Investment volumes in fixed assets per 1 resident (+), thou. rub. Share of own income (tax and non-tax) in a total budget revenue of a municipal district (+), % Share of profitable organizations (+), % |
| Socio- demographic potential | 1. Population density (+), persons per sq. km 2. Natural increase (loss) rate (+), ‰ 3. Migration increase (loss) rate (+), ‰ 4. Average monthly salary (+), rub. 5. Average pension (+), rub. 6. Population's morbidity (-), cases per 100,000 population |
| Social and infrastructural potential | 1. Total accommodation area per 1 inhabitant (+), sq. m 2. Housing commissioning for 1 person per year (+), sq. m 3. Total capacity of heat supply sources (+), Mkcal/hr per 1000 population 4. Length of heat and steam networks in two-pipe calculation by municipal districts and urban districts (+), km per 1 sq. km of territory 5. Single length of street water supply network in municipal districts and urban districts (+), km per 1 sq. km of territory 6. Housing stock improvement with water supply (+), % 7. Housing stock improvement with sewerage (+), % 8. Housing stock improvement with central heating (+), % 9. Kindergarten occupancy rate (-), number of children per 100 kindergarten places 10. Availability of doctors per 10,000 people (+), people 11. Number of paramedic-midwifery stations per 10,000 people (+), units 12. Number of places in cultural and leisure institutions per 1000 residents (+), units |
| Note: «+» – dire | cct indicator, «-» – reverse indicator. |

Table 2. The interval boundaries for determining the score of indicators of the socio-economic potential of rural territories (lp)

| Indicator value score (Ip) | Group boundaries for direct indicators | Group boundaries for reverse indicators |
|----------------------------|--|---|
| 5 | $X_i \ge X_{average} + (3/4) \cdot \sigma$ | $X_i < X_{average} - (3/4) \cdot \sigma$ |
| 4 | $X_{average} + (1/4) \cdot \sigma \le X_i < X_{average} + (3/4) \cdot \sigma$ | $X_{average} - (3/4) \cdot \sigma \le X_i < X_{average} - (1/4) \cdot \sigma$ |
| 3 | $X_{\text{average}} - (1/4) \cdot \sigma \le X_{\text{i}} < X_{\text{average}} + (1/4) \cdot \sigma$ | $X_{average} - (1/4) \cdot \sigma \le X_i < X_{average} + (1/4) \cdot \sigma$ |
| 2 | $X_{average}^{-}(3/4) \cdot \sigma \le X_i < X_{average}^{-}(1/4) \cdot \sigma$ | $X_{cp} + (1/4) \cdot \sigma \le X_i < X_{average} + (3/4) \cdot \sigma$ |
| 1 | $X_i < X_{average}^-(3/4) \cdot \sigma$ | $X_i \ge X_{average} + (3/4) \cdot \sigma$ |

 x_i – indicator value of i-th municipality (urban district) of an RF entity; $x_{average}$ – average value of a corresponding indicator for all analyzed municipalities; σ – mean square deviation for a corresponding indicator. Source: own calculations.

Stage 3. By adding the scores of each indicator included in the block (Ip), the sum of the points for each block of indicators (summbIp) is determined. The point score of each of six blocks of indicators (Ib) is determined based on the following limits of summbIp (Tab. 3).

Stage 4. Summing up the scores of each block (Ib) determines the total score of the socio-economic potential (Icom). Based on the score value, the potential level determines the corresponding municipality group (Tab. 4).

Stage 5. The article estimates by what parameters (indicators) the improvement/deterioration of a municipality's position occurred during the analyzed research period (in our research, it is 2018, respectively, compared to 2005¹). To ensure the temporal comparability of such estimates, the

¹ The choice of the specified research period (2005–2018) is caused by the availability of complete, reliable, and comparable information only for these years for conducting a comprehensive assessment of the rural territories' potential of the Vologda Oblast (both in this article) and for other entities of the Russian Federation.

Table 3. The interval boundaries for determining the score of certain types of socio-economic potential of rural territories (Ib)

| Natural re | esource potential | | | |
|---|------------------------|---------------|-----------|--|
| Indicator block score (lb) | 3 | 2 | 1 | |
| Total points' value of the block indicators (summblp) | [14.66; 20] | [9.33; 14.66) | [4; 9.33) | |
| Produc | ction potential | | | |
| Indicator block score (lb) | 3 | 3 2 | | |
| Total points' value of the block indicators (summblp) | [22; 30] | [14; 22) | [6; 14) | |
| Lab | or potential | | | |
| Indicator block score (lb) | 3 | 2 | 1 | |
| Total points' value of the block indicators (summblp) | [14.66; 20] | [9.33; 14.66) | [4; 9.33) | |
| Finan | cial potential | | | |
| Indicator block score (lb) | 3 | 2 | 1 | |
| Total points' value of the block indicators (summblp) | [11; 15] | [7; 11) | [3; 7) | |
| Socio-dem | ographic potential | | | |
| Indicator block score (Ib) | 3 | 2 | 1 | |
| Total points' value of the block indicators (summblp) | [22; 30] | [14; 22) | [6; 14) | |
| Social and inf | rastructural potential | | | |
| Indicator block score (lb) | 3 | 2 | 1 | |
| Total points' value of the block indicators (summblp) | [44; 60] | [28; 44) | [12; 28) | |
| Source: own calculations. | | | | |

Table 4. The interval boundaries for determining the point assessment of the socio-economic potential of rural territories

| Potential level | Value Icom |
|---------------------------|------------|
| High | [14; 18] |
| Average | [10; 14) |
| Low | [6; 10) |
| Source: own calculations. | |

interval boundaries for scoring the values of 34 Ip indicators for all years are taken based on the results of the first analyzed year. In addition, the values of all cost indicators are reduced to a comparable form.

The next is the interpretation of the results, identification of the problem spheres (with the potential reduction), justification of areas for solving identified problems and improving efficiency of the potential usage for each selected capacity level.

The originality of our approach is a comprehensive assessment (covering economic, social, and infrastructural aspects) of the rural territories' potential in corresponding municipal districts and urban districts. This methodology can

be used to determine priorities (based on the identified assessment of individual components of the potential) of state support for rural territories (or the production sector, or the human potential sphere, or infrastructure) and to justify recommendations for authorities regarding improvement of the efficiency of using existing potential and its development.

Research results

First, we will analyze and identify the key trends and problems of rural development in Russia (in more detail — on the materials of entities of the Russian Federation belonging to the Russian North: Arkhangelsk, Vologda, Murmansk oblasts, Karelia and Komi republics, the Nenets Autonomous Okrug).

The main development problem of most Russia's rural territories is unfavorable demographic situation: a significant population's reduction due to natural decline and high migration outflow. All of this leads to the "extinction" of entire settlements, and territories' manageability loss. In the Russian North, on average, over 27 years (1991–2018), the rural population decreased by 34% (in Murmansk and Arkhangelsk oblasts, the Komi Republic, and the Nenets Autonomous Okrug – by 36–40%; in the Vologda Oblast – by 30%, in the Republic of Karelia – by 16%; tab. 5). In this period, a slight decrease of rural population in Russia as a whole (by 4%) was caused by the entry of the Republic of Crimea and Sevastopol (a federal town) into Russia in 2014.

As for the economic basis for the rural territories' development, by the end of 2018, the

physical volume of agricultural production in the country as a whole exceeded the level of 1991 by 2.3% (*Tab. 6*), but in all regions of the RN, there was a decrease of this indicator's values: from 44% in the Komi Republic to 87% in the Murmansk Oblast.

A significant problem in the development of most Russia's rural territories is an extremely low level of settlements' improvement with basic communal goods. It is one of the factors contributing to a low attractiveness of these areas for living. Thus, in 2018, only 34% of the country's rural housing stock was equipped with all types of landscaping *(Tab. 7)*. A fairly high value of this indicator (80%) was noted in the Murmansk Oblast in 2018; the lowest values were in the Republic of Karelia and the Nenets Autonomous Okrug (less than 5%).

Table 5. Average annual number of permanent population, thou. people

| Entitue of DE | 19 | 91 | 20 | 2018 to 1991, % | | | | |
|---|-------------------|------------------|-------------------|------------------|-------------------|--|--|--|
| Entity of RF | Entire population | Rural population | Entire population | Rural population | Entire population | | | |
| Russian Federation | 148394.2 | 39012.8 | 146830.6 | 37440.4 | 98.9 | | | |
| Russian North | 6116.4 | 1412.1 | 4528.4 | 934.6 | 74.0 | | | |
| Republic of Karelia | 790.5 | 142.9 | 620.3 | 120.6 | 78.5 | | | |
| Komi Republic | 1231.0 | 296,9 | 835.6 | 182.4 | 67.9 | | | |
| Nenets Autonomous Okrug | 51.0 | 18.5 | 43.9 | 11.8 | 86.2 | | | |
| Arkhangelsk Oblast (except AO) | 1510.8 | 394.6 | 1105.7 | 239.2 | 73.2 | | | |
| Vologda Oblast | 1353.5 | 461.1 | 1172.2 | 322.6 | 86.6 | | | |
| Murmansk Oblast | 1179.6 | 98.1 | 750.8 | 57.9 | 63.7 | | | |
| According to: Unified Interdepartmental Statistical Information System (UISIS). Available at: https://fedstat.ru/ | | | | | | | | |

Table 6. Physical Volume Index of agricultural production, % to 1991

| Territory | 1991 | 2000 | 2010 | 2018 |
|---|----------------------|-----------------------|-----------|-------|
| Russian Federation | 100 | 63.6 | 73.7 | 102.3 |
| Republic of Karelia | 100 | 48.8 | 38.9 | 27.8 |
| Komi Republic | 100 | 65.1 | 54.6 | 56.0 |
| Arkhangelsk Oblast | 100 | 56.8 | 32.7 | 25.5 |
| Nenets Autonomous Okrug | 100 | 43.4 | 40.7 | 49.7 |
| Vologda Oblast | 100 | 74.7 | 51.0 | 49.9 |
| Murmansk Oblast | 100 | 40.1 | 34.0 | 13.4 |
| According to: Unified Interdepartmental Statistical Information | System (UISIS). Avai | lable at: https://fec | lstat.ru/ | |

Table 7. Share of housing stock area in rural territories provided with all kinds of amenities, a total housing stock area of the Russian Federation, %

| Territory | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2018 to 2013 (+/-), p.p. | |
|---|------|------|------|------|------|------|--------------------------|--|
| Russian Federation | 26.0 | 28.3 | 30.8 | 31.5 | 32.6 | 34.2 | +8.2 | |
| Republic of Karelia | 10.1 | 3.3 | 4.1 | 4.2 | 4.7 | 4.7 | -5.4 | |
| Komi Republic | 6.3 | 6.2 | 6.1 | 6.3 | 6.1 | 5.9 | -0.4 | |
| Nenets Autonomous Okrug | 3.0 | 2.9 | 3.0 | 2,9 | 3.7 | 3.7 | +0.7 | |
| Arkhangelsk Oblast (except AO) | 6.6 | 6.5 | 6.6 | 6.6 | 6.4 | 6.6 | 0.0 | |
| Vologda Oblast 11.8 12.4 12.8 13.2 13.3 13.4 +1.6 | | | | | | +1.6 | | |
| Murmansk Oblast | 82.4 | 79.9 | 80.1 | 82.9 | 82.1 | 79.8 | -2.6 | |
| According to: Unified Interdepartmental Statistical Information System (UISIS). Available at: https://fedstat.ru/ | | | | | | | | |

Table 8. Share of population provided with unsafe drinking water or living in localities where it was not studied, %

| | | Unsafe water | | | | | | |
|----------------------------------|-------------------------|-------------------|-----------------------|---------------------|-----------------|--|--|--|
| Territory | 20 | 10 | 20 | 2018 | | | | |
| | Urban territory | Rural territory | Urban territory | Rural territory | Urban territory | | | |
| Russian Federation | 7.2 | 15.4 | 3.2 | 9.6 | 0.7 | | | |
| Republic of Karelia | 13.8 | 33.8 | 13.8 | 9.6 | 1.0 | | | |
| Komi Republic | 0.1 | 3.6 | 0.1 | 0.8 | 0.8 | | | |
| Arkhangelsk Oblast | 44.5 | 19.9 | 14.3 | 17.5 | 0.6 | | | |
| Nenets Autonomous Okrug | 0.0 | 10.0 | 20.1 | 40.4 | 0.0 | | | |
| Vologda Oblast | 62.6 | 61.6 | 47.3 | 45.0 | 0.3 | | | |
| Murmansk Oblast 0.0 | | 2.9 | 0.0 | 2.5 | 0.0 | | | |
| According to: Unified Interdepar | tmental Statistical Inf | ormation System (| UISIS). Available at: | https://fedstat.ru/ | | | | |

In rural territories, there is an acute problem with the provision of high-quality drinking water. For instance, almost 10% of the country's rural population consumes unsafe water (Tab. 8). The most negative situation was in the Nenets Autonomous Okrug and the Vologda Oblast, where this indicator value was 40 and 45%, respectively, in 2018. It is worrisome that in some RN regions, nearly a third of drinking water in rural territories has not been explored.

After 2018, available resources of households in rural territories averagely amounted to only 65% of the urban settlements' level *(Tab. 9)*. In all RN regions, this indicator's value was higher than the national average: in 2018, the highest value was observed in Arkhangelsk and Murmansk oblasts (91–93%), the lowest – in the Komi Republic (77%).

Next, we will explore the specifics of the socioeconomic state of rural territories in the Vologda Oblast in more detail *(Tab. 10)*.

Table 9. Ratio of household disposable resources in rural and urban territories, %

| Territory | 2014 | 2015 | 2016 | 2017 | 2018 | 2018 to 2014 (+/-), p.p. | | | |
|---|-------|------|------|------|------|--------------------------|--|--|--|
| Russian Federation | 62.3 | 65.3 | 63.5 | 67.3 | 64.9 | +2.6 | | | |
| Republic of Karelia | 69.5 | 76.7 | 92.0 | 92.5 | 87.3 | +17.8 | | | |
| Komi Republic | 83.1 | 88.3 | 88.0 | 76.3 | 76.9 | -6.2 | | | |
| Nenets Autonomous Okrug | 89.9 | 81.9 | 82.3 | 88.5 | 90.3 | +0.4 | | | |
| Arkhangelsk Oblast (except AO) | 81.8 | 74.8 | 94.4 | 83.9 | 92.8 | +11.0 | | | |
| Vologda Oblast | 66.6 | 67.2 | 86.3 | 84.0 | 80.4 | +13.8 | | | |
| Murmansk Oblast | 106.3 | 92.4 | 84.7 | 90.2 | 91.1 | -15,2 | | | |
| According to: Unified Interdepartmental Statistical Information System (UISIS). Available at: https://fedstat.ru/ | | | | | | | | | |

| | | Russia | | Vologda Oblast | | |
|--|----------|----------|-----------------|----------------|--------|--|
| Indicator name | 2014 | 2018 | 2018 to 2014, % | 2014 | 2018 | |
| Investments in basic capital at the municipal budget expense, mil. rub. | 27778.4 | 16918.8 | 11.6* | 394.5 | 365.9 | |
| Residential buildings' commissioning per 1 rural resident, sq. m | 0.47 | 0.38 | 80.8 | 0.30 | 0.22 | |
| Single length of the street gas network, km | 312462.6 | 328646.9 | 105.2 | 853.4 | 1116.1 | |
| Share of heat supply sources with a capacity up to 3 Mkcal/hr, % | 78.1 | 76.1 | -2.0 | 85.2 | 84.1 | |
| Share of heat and steam networks replaced and repaired, % of needing replacement | 9.8 | 7.6 | -2.3 | 7.4 | 3.9 | |
| Share of street water supply network replaced and repaired, % of needing replacement | 4.1 | 3.2 | -0.9 | 6.6 | 2.9 | |
| Share of the street sewer network replaced and repaired, % of needing replacement | 1.9 | 1.5 | -0.4 | 12.1 | 6.7 | |
| Number of utility services of population, thou. units | 42.63 | 42.68 | 100.1 | 0.38 | 0.42 | |
| Number of shops, thou. units | 199.39 | 186.98 | 93.8 | 2.56 | 2.29 | |
| Number of seats in collective accommodation facilities, thou. units | 397.85 | 561.66 | 141.2 | 3.45 | 5.85 | |
| Number of sports facilities, thou. units | 98.12 | 95.79 | 97.6 | 0.84 | 0.86 | |
| Number of engaged in children's and youth sports schools, thou. people | 545.68 | 573.63 | 105.1 | 2.77 | 1.67 | |
| Number of treatment and preventive organizations, thou. units | 37.79 | 38.08 | 100.8 | 0.60 | 0.57 | |

Table 10. Selected indicators of socio-economic development of rural territories of Russia and the Vologda Oblast in 2014–2018

Source: Statistical information on the socio-economic development of rural territories of the Russian Federation. Federal State Statistics Service of the Russian Federation. Available at: https://gks.ru/free_doc/new_site/region_stat/sel-terr/sel-terr.html

It is necessary to note the following trends in the rural territories' development of the Vologda Oblast and the country as a whole over the previous five years:

- volume of housing commissioning reduced
 (by 19 and 27%, respectively);
- replacement rate of heat and steam networks, water supply, and sanitation remains quite low (less than 10%), and it does not allow upgrading networks to create comfortable living conditions in rural territories; the majority (76%) of heating sources are low powered;
- number of public service facilities grows
 (by 9% in the Vologda Oblast), as well as places in collective accommodation facilities (by 70%), but

there is a decrease of a number of shops (by 11%), treatment and preventive organizations (by 5%), a number of children involved in sports schools (by 40%).

Table 11 presents the dynamics of values of the demographic development indicator in rural territories of the Vologda Oblast in 2000–2018. On this basis we can draw the following conclusions: in general, rural population in regions of the Oblast decreased by 20% (in 11 out of 26 regions, more than a third of population was affected); rate of natural population decline got significantly higher (in 2018 it was -9,5 per mille against -3,9 the average for the region), as well as the migration loss (-6,2 per mille against -3,8, respectively).

^{*} Investment share in rural development in a total volume of investments at the local budgets' expense, %.

Table 11. Key indicators of demographic development of municipal districts and rural territories of the Vologda Oblast in 2000–2018

| Municipal district, | Rural population size, thou. people | | | Share of rural population, % | Natural increase rate, per mille | | | Net migration rate, per mille | | |
|------------------------|--|-------|-----------------|------------------------------|-------------------------------------|-------|--------|----------------------------------|-------|--------|
| urban district | 2000 | 2018 | 2018 to 2000, % | 2018 | 2000 | 2018 | 2018 * | 2000 | 2018 | 2018 * |
| Babayevsky | 12.9 | 7.8 | 61.0 | 40.9 | -15.0 | -8.9 | -16.3 | 1.3 | -8.1 | -16.6 |
| Babushkinsky | 15.5 | 11.5 | 73.8 | 100.0 | -9.7 | -10.0 | -10.1 | -7.4 | -6.1 | -6.1 |
| Belozersky | 11.0 | 5.8 | 53.3 | 40.3 | -10.6 | -11.5 | -15.2 | -1.6 | -7.5 | -11.8 |
| Vashkinsky | 10.3 | 6.6 | 64.0 | 100.0 | -10.3 | -13.3 | -13.3 | 1.2 | -10.0 | -10.0 |
| Velikoustyugsky | 22.6 | 15.6 | 68.9 | 29.0 | -8.7 | -6.8 | -12.0 | 1.9 | -3.6 | -1.4 |
| Verkhovazhsky | 16.6 | 12.7 | 76.9 | 100.0 | -9.4 | -6.4 | -6.4 | 5.4 | -5.5 | -5.5 |
| Vozhegodsky | 12.5 | 8.4 | 67.1 | 57.9 | -12.7 | -10.5 | -11.9 | 8.1 | -5.0 | -6.3 |
| Vologodsky | 51.1 | 52.2 | 102.1 | 100.0 | -5.8 | -4.5 | -4.6 | -2.0 | -3.7 | -3.7 |
| Vytegorsky | 21.0 | 13.7 | 65.0 | 57.1 | -10.4 | -11.6 | -15.2 | 2.7 | -7.2 | -13.8 |
| Gryazovetsky | 19.0 | 11.9 | 62.9 | 37.1 | -6.8 | -7.7 | -9.3 | -2.9 | -0.6 | -6.7 |
| Kaduysky | 4.5 | 3.2 | 71.8 | 19.5 | -10.9 | -7.0 | -14.0 | -4.4 | -5.5 | -12.8 |
| Kirillovsky | 10.7 | 7.2 | 67.1 | 49.0 | -11.5 | -12.3 | -18.3 | 1.3 | -5.8 | -20.3 |
| Kichmengsko-Gorodetsky | 22.8 | 15.4 | 67.3 | 100.0 | -12.5 | -7.6 | -7.6 | -0.5 | -18.4 | -18.4 |
| Mezhdurechensky | 7.9 | 5.3 | 67.6 | 100.0 | -9.8 | -7.8 | -7.8 | 5.8 | -8.9 | -8.9 |
| Nikolsky | 18.6 | 11.6 | 62.6 | 59.3 | -10.0 | -6.6 | -10.5 | -1.1 | -8.0 | -11.4 |
| Nyuksensky | 11.9 | 8.4 | 70.0 | 100.0 | -5.0 | -10.1 | -10.0 | 0.1 | -11.8 | -11.8 |
| Sokolsky | 10.0 | 7.0 | 69.4 | 14.5 | -11.1 | -6.0 | -12.8 | -5.5 | -2.9 | -8.7 |
| Syamzhensky | 10.6 | 8.0 | 75.3 | 100.0 | -9.8 | -7.7 | -7.7 | 9.3 | -8.8 | -8.8 |
| Tarnogsky | 15.6 | 11.2 | 71.9 | 100.0 | -8.8 | -8.8 | -8.8 | -1.4 | -5.4 | -5.4 |
| Totemsky | 16.2 | 12.5 | 77.5 | 56.3 | -5.0 | -5.7 | -7.1 | 4.8 | -1.7 | 0.6 |
| Ust-Kubinsky | 5.4 | 7.5 | 140.2 | 100.0 | -14.3 | -12.1 | -12.1 | 8.8 | -13.9 | -14.0 |
| Ustyuzhensky | 11.6 | 8.1 | 69.4 | 48.7 | -13.6 | -9.1 | -8.8 | 1.3 | -6.1 | -8.6 |
| Kharovsky | 9.5 | 4.8 | 50.9 | 35.2 | -14.3 | -15.6 | -14.9 | 1.5 | -13.8 | -27.3 |
| Chagodoshchensky | 4.8 | 3.1 | 64.0 | 26.2 | -17.2 | -11.2 | -16.0 | 8.1 | -12.9 | -14.4 |
| Cherepovetsky | 37.5 | 38.6 | 102.9 | 100.0 | -10.5 | -8.2 | -8.2 | 5.9 | -0.6 | -0.7 |
| Sheksninsky | 13.0 | 14.7 | 112,9 | 44.0 | -9.1 | -2.6 | -6.6 | 1.9 | 3.7 | 18.2 |
| Vologda | 0.0 | 7.2 | - | 2.3 | -4.3 | 0.9 | -18.3 | -0.5 | -3.2 | 0.1 |
| Cherepovets | 0.0 | 0.0 | - | 0.0 | -4.1 | -2.1 | - | 3.5 | -2.4 | - |
| Districts' total | 403.2 | 312.8 | 77.6 | 58.8 | -10.1 | -7.8 | - | 0.8 | -5.0 | - |
| Oblast's total | 403.2 | 320.0 | 79.4 | 27.4 | -7.2 | -3.9 | -9.5 | 1.2 | -3.8 | -6.2 |

^{*} By rural settlements.

Note: A significant increase in the rural population in the Ust-Kubinsky, Sheksninsky and Cherepovetsky districts is mainly due to the fact that some urban settlements there received the status of rural settlements in this period, and, accordingly, a number of rural population in these districts also increased statistically.

Source: *Municipal Districts and Urban Districts of the Vologda Oblast. Socio-Economic Indicators. 2000–2018: Stat. Coll.* Vologdastat. Vologda, 2019. 271 p.

Further, we will review the results of testing the proposed methodological tools for 2005–2018 (*Tab. 12*). The choice of this research period is justified by the fact that, first, 2005 was a year before the new Federal Law no. 131-FZ, "On the general principles of the organization of local self-government in the Russian Federation",

dated October 6, 2003, entered into force in several Russian entities (including the Vologda Oblast) on January 1, 2006 (nationwide – on January 1, 2009). Second, we can collect all statistical information for a complete, reliable, and comparable assessment of the rural territories' potential starting exactly from 2005.

Table 12. Assessment results of the socio-economic potential of rural territories of the Vologda Oblast in 2005–2018

| Municipal district | 2005 | | 2010 | | 2015 | | 2018 | |
|------------------------|---------|-------|---------|-------|---------|-------|---------|-------|
| | Meaning | Level | Meaning | Level | Meaning | Level | Meaning | Level |
| Vologodsky | 13 | a | 14 | h | 15 | h | 16 | h |
| Kaduysky | 12 | a | 15 | h | 15 | h | 15 | h |
| Sheksninsky | 16 | h | 17 | h | 15 | h | 15 | h |
| Gryazovetsky | 16 | h | 14 | h | 13 | a | 14 | h |
| Cherepovetsky | 14 | h | 12 | a | 12 | a | 14 | h |
| Vozhegodsky | 9 | I | 7 | I | 10 | a | 13 | a |
| Sokolsky | 14 | h | 14 | h | 13 | a | 13 | а |
| Totemsky | 13 | a | 13 | a | 13 | a | 13 | a |
| Babushkinsky | 10 | a | 10 | a | 10 | a | 12 | a |
| Velikoustyugsky | 13 | a | 12 | a | 13 | a | 12 | a |
| Verkhovazhsky | 10 | a | 11 | a | 12 | a | 12 | a |
| Kharovsky | 9 | | 10 | a | 10 | a | 12 | а |
| Babayevsky | 11 | a | 11 | a | 12 | a | 11 | a |
| Kirillovsky | 11 | a | 10 | a | 10 | a | 10 | a |
| Kichmengsko-Gorodetsky | 9 | | 11 | a | 10 | a | 10 | а |
| Mezhdurechensky | 10 | a | 8 | I | 8 | I | 10 | a |
| Nikolsky | 11 | a | 11 | a | 10 | a | 10 | a |
| Ustyuzhensky | 11 | a | 11 | a | 12 | a | 10 | a |
| Chagodoshchensky | 13 | a | 11 | a | 11 | a | 10 | a |
| Vytegorsky | 9 | 1 | 11 | a | 9 | I | 9 | I |
| Nyuksensky | 14 | h | 10 | a | 12 | a | 9 | 1 |
| Syamzhensky | 11 | a | 10 | a | 10 | a | 9 | 1 |
| Tarnogsky | 12 | a | 13 | a | 12 | a | 9 | 1 |
| Ust-Kubinsky | 11 | a | 12 | a | 10 | a | 9 | 1 |
| Belozersky | 11 | a | 9 | 1 | 10 | a | 8 | 1 |
| Vashkinsky | 8 | 1 | 9 | 1 | 8 | I | 8 | 1 |

Note: h - high potential level, a - average, l - low.

Semi-bold type is used for the territories with a higher potential level in 2018 compared to 2005; italic type is used for the territories with a lower potential level.

Source: Municipal Districts and Urban Districts of the Vologda Oblast. Socio-Economic Indicators. 2000–2018: Stat. Coll. Vologdastat. Vologda, 2019. 271 p. (and the similar collection for the previous years); Resources of the Vologda Oblast. 2000–2018: Stat. Coll. Vologdastat. Vologda, 2019. 141 p. (and the similar collection for the previous years); Complex territorial cadaster of the natural resources of the Vologda Oblast, issue 24 (as for January 1, 2019). Official website of the Government of the Vologda Oblast. Available at: https://vologda-oblast.ru/dokumenty/2528795/?sphrase_id=968304 (and the similar cadasters for the previous years); Main performance indicators of the healthcare facilities of the Vologda Oblast for 2018. Department of Health of the Vologda Oblast; Medical information and analytical center. Available at: https://miac.volmed.org.ru/files/medstat/sbornik_za_2018_g..rar (and the similar collection for the previous years).

The data in table 12 shows that only five districts of the region had a high potential for rural development in 2018. They are located around major towns (Vologda and Cherepovets). The largest number (14 out of 26) of the regions districts is characterized by the average potential. In 2005–2018, five districts managed to improve their situation, and six districts had worse capacity assessments.

It is also important to determine which individual components (indicators) of the potential assessment showed the most noticeable deterioration in the situation (the district moved to the group with a lower level of values of a particular initial statistical indicator of the potential assessment). The results of such assessments are presented in a comparable form in *table 13*.

Table 13. Change dynamics in the scores of individual indicators for assessing the socio-economic potential of rural territories of the Vologda Oblast (2018 compared to 2005 in a comparable assessment)

| Municipal district | Wat | Cat | FC | Ufr | WP | Mgp | Mor | PHS | NCP | NPC |
|------------------------|-----|-----|----|-----|----|-----|-----|-----|-----|-----|
| Babayevsky | -1 | -1 | -4 | 1 | -1 | -2 | 0 | 0 | -4 | -2 |
| Babushkinsky | 0 | -1 | -2 | -3 | -1 | 0 | -1 | -1 | -1 | -3 |
| Belozersky | 0 | 0 | 1 | 2 | -1 | -2 | -2 | 0 | -3 | -2 |
| Vashkinsky | 0 | -2 | 0 | 3 | -1 | -2 | 1 | 0 | 0 | -3 |
| Velikoustyugsky | -2 | 0 | -2 | 1 | -4 | -2 | 0 | 0 | 0 | 0 |
| Verkhovazhsky | 0 | -1 | -2 | 0 | -2 | -1 | -1 | 0 | -2 | -1 |
| Vozhegodsky | -1 | -1 | -4 | 2 | 0 | -4 | 2 | 0 | -3 | -1 |
| Vologodsky | -1 | 0 | -2 | -1 | -4 | -4 | 0 | -1 | -2 | -2 |
| Vytegorsky | 3 | 0 | 0 | 1 | -2 | -1 | -3 | 0 | 0 | 0 |
| Gryazovetsky | -2 | 0 | -2 | -1 | -3 | 2 | -2 | 0 | -2 | -1 |
| Kaduysky | 0 | 0 | 3 | 2 | -2 | -4 | -2 | 0 | -1 | -3 |
| Kirillovsky | 0 | 0 | -1 | 0 | -1 | -4 | 0 | 1 | -1 | -4 |
| Kichmengsko-Gorodetsky | 0 | 0 | 0 | -2 | 0 | -1 | 1 | 0 | 0 | -2 |
| Mezhdurechensky | 0 | -1 | -3 | 0 | 0 | -1 | 1 | 1 | 1 | 0 |
| Nikolsky | 0 | 0 | -3 | -1 | 0 | -2 | -3 | 0 | -1 | 0 |
| Nyuksensky | 0 | -1 | -4 | -3 | -1 | -4 | -2 | -4 | -1 | -2 |
| Sokolsky | -2 | 0 | -2 | 1 | -3 | 0 | 0 | -1 | -1 | 0 |
| Syamzhensky | 0 | -1 | 0 | -1 | -2 | -3 | -2 | -3 | -3 | -3 |
| Tarnogsky | -1 | 0 | 0 | -1 | -1 | 0 | -3 | 0 | -2 | 0 |
| Totemsky | -1 | 0 | -3 | -2 | -3 | -2 | -2 | -2 | 0 | -2 |
| Ust-Kubinsky | -1 | -3 | -3 | -2 | 0 | -3 | 0 | 0 | 1 | -2 |
| Ustyuzhensky | -1 | 0 | -2 | -1 | -1 | -2 | -1 | 0 | -1 | -3 |
| Kharovsky | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -2 | 0 | -2 |
| Chagodoshchensky | -2 | 1 | -4 | -4 | 0 | -3 | -2 | -1 | 0 | 0 |
| Cherepovetsky | -1 | -1 | -2 | -3 | 0 | -2 | 0 | 0 | -3 | -1 |
| Sheksninsky | -1 | 0 | -1 | -1 | -4 | 1 | -1 | 0 | -4 | -2 |

Note: The maximum score for each indicator is 5, and the minimum score is 1. Accordingly, "-4" means that the district has moved during the analyzed period, for example, from a group with a high level of development (score 5) to a group with a low level (score 1). Wat – Freshwater resources, thou. cub. m. per day; Cat – Number of cattle of all categories per 1000 inhabitants; FC – the Degree of funds consumption at the end of the year, %; Ufr – update funds rate, %; WP – Share of working population in the total population, %; Mgp – migration growth (decline) population %; Mor – Morbidity per 1000 population cases; PHS – total power of heat sources, Mkcal/hr; NCP – Number of children per 100 places; PMC – Number of places in cultural and leisure-type institutions per 1000 inhabitants. Source: own calculations.

Therefore, the key issues that lead to the reduction of rural territories' potential development in the Vologda Oblast are significant migration outflow of rural population, mostly people of working age; reduction of cattle; insufficient rate of funds consumption; reduction of heat sources' power; reduction of places in kindergartens, cultural and leisure type institutions: partly due to the optimization of this sector's institutions (liquidation, merging, reorganization).

Using the research results and its future prospects

Based on the analysis results of the main trends and problems and the assessment of rural territories' potential, the author has identified the key development areas that will ensure the prevention of further degradation, improve utilization of rural territories' potential, and create conditions for sustainable development.

1. Fully ensure the implementation of measures and achievement of objectives of the state program of the Russian Federation "Complex Development of Rural Territories". Government Resolution of the Russian Federation no. 391, dated March 31, 2020, includes the reduction of its targets and a 1.53 decrease of the program's financial support for the entire implementation period (from 2.288 to 1.491 billion rubles). Accordingly, taking into account the development of the financial and economic situation in the country in 2020–2021, it is advisable to return to the issue of increasing the financial support at least to the level planned in the original version of the program.

In addition, it is possible to expand the scope of the state program's activities in terms of solving the tasks of diversifying the rural economy and creating new jobs, reducing the significant migration outflow from rural territories, more extensive development of centralized water supply and sewerage in rural territories, attracting and securing qualified personnel in rural territories, etc.

2. Regarding the economic diversification and employment of rural population, it is necessary to ensure equal access of agricultural producers to the means of state support; to render state support to development of small and medium enterprises in rural territories including rural tourism (environmental, event, ethnographic, gastronomic, etc.) which has significant potential in the coming years taking into account possible continuations of restrictions on movement between countries.

In the process of developing tourism and encouraging urban residents to move to rural territories, it is worth using a marketing approach including the formation of local brands (for example, gastronomic), introduction of a full-time specialist in the development of tourism and recreation in the economic departments of municipal districts.

- 3. To create conditions for attracting extrabudgetary sources of financing for investments in the rural social and engineering infrastructure including the introduction of the project realization practice on the basis of public-private and municipal-private partnerships.
- 4. To ensure the development of various forms of agricultural cooperation, for example, through grant support to the development of material-technical base of agricultural consumer cooperatives; co-financing from the federal budget for the development of regional cooperative infrastructure (regional fund's financial support of cooperatives, centers for competence and advanced training of cooperative personnel, cooperative distribution network).
- 5. To assemble professional teams of experts, specialists, and activists interested in the rural territories' development in each entity of the Russian Federation (using the case study regarding the project of the All-Russian Popular Front "Rural Territory. The Development Territory", which has been successfully implemented since March 2019).

- 6. Actively support and develop various cooperation forms between municipalities (implementation of joint projects, events, establishment of inter-municipal organizations, etc.).
- 7. To support various forms of public participation in the municipality's development management (territorial public self-government, initiative budgeting, citizens' self-taxation, village headmen, etc.).

In our opinion, in general, Russia's rural territories can successfully develop only using a complex and systematic approach to their development by all authorities and ensuring effective interaction between authorities, business, population, scientific community, modern innovative technology adoption in the agro-industrial complex and municipalities' administration.

The author believes that the solution of the aforementioned comprehensive and systemic tasks for the rural territories' development is possible only if the scientific and methodological provision of the following issues is worked out in detail:

- 1. Criteria substantiation and typology development of rural territories of the entity of the Russian Federation for the implementation of regional and local socio-economic policy.
- 2. Development of economic and mathematical models that will reflect the relationship between indicators that characterize the production development level, infrastructure state, social sphere, and demography.
- 3. Systematization of factors of potential formation and Russia's rural territories' development, justification of the scientific and methodological approach to the assessment of the direction and influence power of these factors.
- 4. Development of a method for determining "the resettlement centers" and an algorithm for determining needs and adequacy of engineering,

- utility, and social infrastructure facilities taking into account the current and future level of economic development of rural territories in the entities of the Russian Federation; justification of the approach to determining the need for human resources, the construction of social and industrial facilities in the Russia's rural territories.
- 5. Development of an algorithm for the formation of an optimal municipal-territorial structure in the region in order to create a network of self-sufficient, self-developing urban and rural settlements. In our opinion, it is currently important to determine an optimal minimum number of residents of a rural settlement, to assess a real effectiveness (ineffectiveness) of an actual elimination of the settlement level in Moscow, Kaliningrad oblasts and a number of other Russia's entities by converting municipal districts into urban districts (from 2019 – into municipal districts as well), to justify an approach to ensuring the territorial accessibility of local self-government bodies for residents of municipalities and a real role of population in solving local issues and problems.
- 6. Working out organizational and economic mechanism that ensures the creation of conditions for complex and sustainable development of rural territories in the region, which also involves creation of favorable economic, institutional, organizational, and financial conditions.
- 7. Justification of areas and development of recommendation for the state authorities of the entities of the Russian Federation and local self-government bodies on the effective usage of the socio-economic potential of rural territories and the development of industries that are the basis of their economic specialization taking into account strategic and federal and regional program documents; recommendations for the authorities on the implementation of the territorial marketing concept in the administration of rural development. Our further scientific research will solve these tasks.

In conclusion, we should note that the study's contribution, the results of which are presented in this article, to the theoretical science development is the justification of the approach and methodo-logical tools for assessing the socio-economic potential of rural territories. Its contribution to the development

of applied science is the identification of trends, issues of rural territories development in the Russian North and the Vologda Oblast, as well as usage of this basis for the definition of the ways of improving the management of their development and the main challenges for further research on the subject.

References

- 1. Leitfaden für lokale Akteure zur CLLD. Europäische Struktur- und Investitionsfonds Leitfaden für Mitgliedstaaten und Programmbehörden Leitfaden für Begünstigte. Europäische Union, Mai 2014. 122 p. Available at: http://ec.europa.eu/regional policy/sources/docgener/informat/2014/guidance clld local actors de.pdf
- 2. *Cork 2.0 Declaration. A Better Life in Rural Areas*. European Union, 2016. 12 p. DOI: 10.2762/370418. Available at: https://enrd.ec.europa.eu/sites/enrd/6iles/cork-declaration_en.pdf
- 3. *Leader Local Development Strategies (LDS). Guidance on design and implementation.* European Union, June 2016. 31 p. Available at: https://enrd.ec.europa.eu/sites/enrd/files/enrd-guidance_lds.pdf
- 4. Li Y., Westlund H., Liu Y. Why some rural areas decline while some others not: An overview of rural evolution in the world. *Journal of Rural Studies*, 2018, vol. 68, pp. 135–143.
- 5. Konečny O. The leader approach across the European Union: One method of rural development, many forms of implementation. *European Countryside*, 2019, vol. 11, iss. 1, pp. 1–16.
- 6. Stoyanets N., Hu Z.T., Chen J.M. The evolution and experience of china's rural governance reform. *Agricultural and Resource Economics-International Scientific E-journal*, vol. 5, no. 2, pp. 40–50.
- 7. Battino S., Lampreu S. The role of the sharing economy for a sustainable and innovative development of rural areas: A case study in Sardinia (Italy). *Sustainability (Switzerland)*, 2019, vol. 11, iss. 11, 3004. DOI: 10.3390/su11113004
- 8. Schiller H. *Networks of Local Action Groups in Rural Areas The Example of the EU Initiative Broads and Rivers LEADER*+. VDM Verlag Dr. Mueller e.K., 2013. 92 p.
- 9. Mantino F. *Sel'skoe razvitie v Evrope: politika, instituty i deistvuyushchie litsa na mestakh s 1970-kh godov do nashikh dnei* [Rural Development in Europe: Politics, Institutions and Local Actors from the 1970s to the Present]. Translated from Italian by I. Khramova. Rome: FAO; Milano: Business media of the Sole 24 Ore, cop., 2010. 272 p.
- 10. Bukhval'd E.M., Voroshilov N.V. Current issues in the development of municipal entities and in reforming the institution of local self-government. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz=Economic and Social Changes: Facts, Trends, Forecast*, 2018, vol. 11, no. 1, pp. 132–147. DOI: 10.15838/esc.2018.1.55.9 (in Russian).
- 11. Uskova T.V. et al. *Sotsial'no-ekonomicheskie problemy lokal'nykh territorii: monografiya* [Socio-Economic Problems of Local Territories: Monograph]. Vologda: ISEDT RAS, 2013. 196 p.
- 12. Shulepov E.B., Zadumkin K.A., Shcherbakova A.A. On approaches to constructing a new public administration system of developing rural territories of the Russian Federation. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz=Economic and Social Changes: Facts, Trends, Forecast*, 2020, vol. 13, no. 4, pp. 136–153. DOI: 10.15838/esc.2020.4.70.8 (in Russian).
- 13. Maretskaya A.Yu., Maretskaya V.N. On the issue of natural resource potential of rural areas of the Northern region. *Fundamental'nye issledovaniya=Fundamental Research*, 2019, no. 11, pp. 95–99 (in Russian).
- 14. Scherbakova A.S. Rating assessment of social and economic potential of rural areas of the North. *APK: Ekonomika, upravlenie=Agro-Industrial Complex: Economics, Management*, 2020, no. 1, pp. 56–64 (in Russian).

- 15. Semin A.N., Bukhtiyarova T.I., Khilinskaya I.V. The indicative strategy of active potential growth of rural territories in modern conditions of digital economy. *Nauchnyi ezhegodnik Tsentra analiza i prognozirovaniya*= *Scientific Annual Publication of the Analysis and Forecast Centre*, 2018, no. 1 (2), pp. 57–63 (in Russian).
- 16. Kostyaev A.I. Paradigms and concepts of rural territories development. *Rossiiskii elektronnyi nauchnyi zhurnal=Russian Electronic Scientific Journal*, 2018, no. 3 (29), pp. 7–35 (in Russian).
- 17. Ivanov V.A. Rural development in the Northern regions: Problems, directions and mechanisms. *Sever i rynok: formirovanie ekonomicheskogo poryadka=The North and the Market: Forming the Economic Order*, 2020, no. 1 (67), pp. 127–139 (in Russian).
- 18. Bondarenko L.V. Program-targeted approach to rural development. *APK: Ekonomika, upravlenie=Agro-Industrial Complex: Economics, Management*, 2020, no. 2, pp. 47–62 (in Russian).
- 19. Ushachev I.G., Bondarenko L.V. Sustainable rural development: Problems and solutions. *Analiticheskii vestnik Soveta Federatsii Federal'nogo Sobraniya RF=Analytical Bulletin of the Federation Council of the Federal Assembly of the Russian Federation*, 2019, no. 5 (719), pp. 13–17 (in Russian).
- 20. Adukov R.Kh., Adukova A.N., Medvedev A.V. et al. *Mekhanizmy otsenki, razvitiya i effektivnogo ispol'zovaniya ekonomicheskogo potentsiala sel'skikh territorii: monografiya* [Mechanisms for Assessment, Development and Effective Use of the Economic Potential of Rural Areas: Monograph]. Moscow: NIPKTs Voskhod-A, 2019. 199 p.
- 21. Uzun V.Ya. Key factors for sustainable rural development: Fiscal subsidies or rural economy? *Nikonovskie chteniya=Nikon Readings*, 2019, no. 24, pp. 15–20 (in Russian).
- 22. Sverdlov M.Yu., Zinov'ev A.G. Methodological aspects of assessing the socio-economic potential of the region. *Evraziiskoe Nauchnoe Ob"edinenie=Eurasian Scientific Association*, 2019, no. 4-4 (50), pp. 223–225 (in Russian).
- 23. Syrov A.N. Assessment of the economic potential of the territory. *Vestnik Volgogradskogo gosudarstvennogo universiteta*. *Seriya 3: Ekonomika*. *Ekologiya=Journal of Volgograd State University*. *Economics*, 2008, no. 2, pp. 98–102 (in Russian).
- 24. Rusinova O.S. Assessment of the efficiency of using the resource potential of the socio-economic development of rural areas of the agrarian region. *Vestnik Udmurtskogo universiteta*. *Ser. Ekonomika i pravo=Bulletin of Udmurt University. Series Economics and Law*, 2011, no. 3, pp. 48–52 (in Russian).
- 25. Grachev A.B. Social and economic potential of municipal formations and technique of its definition. *Regional'nye issledovaniya=Regional Studies*, 2008, no. 4 (19), pp. 11–15 (in Russian).
- 26. Krasnova T.G., Balabanova E.A. The research of municipal bodies' socioeconomic potential. *Izvestiya IGEA=Bulletin of Baikal State University*, 2010, no. 1 (69), pp. 56–58 (in Russian).
- 27. Martynushkin A.B. Improving governance as the main factor in developing the economic potential of rural areas. In: *Teoriya i praktika effektivnosti gosudarstvennogo i munitsipal'nogo upravleniya: mater. konf. Kursk, 29 marta 2019 g.* [Theory and practice of public and municipal administration efficiency: Proceedings of the conference. Kursk, March 29, 2019]. Kursk: YuZGU, 2019. Pp. 231–234 (in Russian).
- 28. Smirnova T.G., Selyakova S.A., Kozhina E.N. *Proizvodstvennyi potentsial sel'skogo raiona: sostoyanie, perspektivy: monografiya* [The Production Potential of the Rural Area: State, Prospects: Monograph]. Ed. by T.V. Uskova. Vologda: ISEDT RAS, 2010. 148 p.
- 29. Bondarenko L.V., Kozlov A.V., Yakovleva O.A. Methodology of integrated assessment of social and economic development of rural territories. *Ekonomika sel'skogo khozyaistva Rossii=Agricultural Economics of Russia*, 2016, no. 10, pp. 44–52 (in Russian).
- 30. Gazizov R.M. Stable development of rural territories: Method of estimation and typologization. *Aktual'nye problemy ekonomiki i prava=Actual Problems of Economics and Law*, 2014, no. 3 (31), pp. 34–42 (in Russian).
- 31. Nikitina T.I. Comprehensive methodology for assessing the level of sustainable socio-economic development of rural areas. *Vestnik Kurskoi gosudarstvennoi sel'skokhozyaistvennoi akademii=Vestnik of Kursk State Agricultural Academy*, 2019, no. 4, pp. 106–112 (in Russian).

- 32. *Potentsial razvitiya munitsipal'nykh obrazovanii: soderzhanie, otsenka, upravlenie (na materialakh Respubliki Komi)* [Development Potential of Municipalities: Content, Assessment, Management (based on the Materials of the Komi Republic)]. Ed. by V.N. Lazhentsev. Syktyvkar: KNTs UrO RAN, 2008. 344 p.
- 33. *Problemy ustoichivogo razvitiya sel'skikh territorii: kollektivnaya monografiya* [Problems of Sustainable Development of Rural Areas: Collective Monograph]. Ed. by A.V. Glotko. Gorno-Altaisk: RIO GAGU, 2015. 196 p.
- 34. Tolokonnikov A.Yu. Integral assessment of the socio-economic development of rural areas of the Altai Territory. *Vestnik Altaiskogo gosudarstvennogo agrarnogo universiteta=Bulletin of Altai State Agricultural University*, 2013, no. 1 (99), pp. 113–118 (in Russian).
- 35. Leonidova G.V., Chekmareva E.A., Sovetov P.M., Panov M.M. *Trudovoi potentsial sel'skikh territorii: metodologicheskie aspekty otsenki: preprint* [Labor Potential of Rural Areas: Methodological Aspects of Assessment: Preprint]. Vologda: ISEDT RAS, 2015. 78 p.

Information about the Author

Nikolai V. Voroshilov — Candidate of Sciences (Economics), Senior Researcher, Vologda Research Center of the Russian Academy of Sciences (56A, Gorky Street, Vologda, 160014, Russian Federation; e-mail: niks789@yandex.ru)

Received November 2, 2020.