

# MONITORING OF RUSSIAN RURAL TERRITORIES COMPLEX DEVELOPMENT

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## Abstract

The social-economic condition of rural territories touches upon the interest of most people and the country in general, that is not possible to ignore problems about the development monitoring this important economic part of modern Russia. The quality of monitoring depends on, first of all, indicators, reflected a condition of agricultural territories. The big step in this direction was, an acceptance in 2015 the Strategy of Sustainable Development of Rural Territories in the Russian Federation for the period up to 2030, which contains the pattern of target indicators and their values disaggregated by years. The next step should be the development and acceptance of regional strategies, parts of which indicators should be associated with Federal Strategy. The monitoring and analysis of the first results of the strategy realization have shown a number of shortcomings when the system of target indicators was forming. Therefore, it is necessary to implement corrections in the pattern of target indicators of the Federal Strategy.

**Keywords:** rural territories, target indicators, monitoring, development strategy, indicator's criteria.

## Introduction

The development of rural territories is an important national economic task, the solution of which the Government of the Russian Federation gives special importance to. In 2015, by order of the Government of the Russian Federation, the Strategy for Sustainable Development of Rural Territories of the Russian Federation for the period until 2030 (hereinafter referred to as the Strategy) was approved, in 2019 - the state program "Integrated Development of Rural Territories" for 2020-2025.

The actuality of rural development is determined, on the one hand, by the size of available resources (more than 1.5 billion hectares of land, 37.7 million rural residents) [7,12], and on the other, by the significant economic results that have already been obtained and which will allow in the future get a rural economy.

The program-targeted method is used in the management of rural development in the Russian Federation [4,5,8,10]. Program and target management is implemented through the development and implementation of federal, regional and municipal target programs. Its organic components are the justification of program indicators, their target levels and subsequent monitoring of their achievement.

The Strategy presents 18 indicators and their target levels by year. The content of this 18 × 18 matrix, the first column of which represents the actual levels of indicators for 2013, is, at first, the result of the collective work of scientists and specialists of great practical importance; secondly, the subject of critical analysis, since you cannot rely on the fact that once compiled a matrix of target indicators will not require adjustment. So, in the article A.V. Turyansky, V.L. Anichin and A.I. Dobrunova substantiated proposals to change the composition of targets. In particular, it is proposed to exclude such an indicator as "An increase in the share of peasant (farmer) households and individual entrepreneurs in agricultural production up to 20%" due to the lack of theoretical and practical grounds [13]; thirdly, the subject of further research on the development of methods for monitoring the achievement of targets. Monitoring the achievement of the targets identified in the Strategy should solve several interrelated tasks:

- 1) Evaluate the achievement of target indicators, taking into account the factors influencing them, in the whole of the Russian Federation;
- 2) Measure the contribution of regional management entities to achieving targets. Taking into account the federal structure of Russia, it is logical to consider as the subjects of governance the authorities of the regions of the Russian Federation, whose activity in the development of rural territories for the reporting period should be evaluated in dynamics and in comparison, with other regions;

3) Solve the problem of the ambiguity of changes in a number of targets. The analysis shows that the growth of a number of target indicators of the Strategy, for example, “The total area of residential premises per average inhabitant in rural settlements”, can be achieved both by increasing the number of objects of socio-economic infrastructure and by reducing the number of the rural population. In this regard, it is necessary to evaluate the contribution of regions to the development of rural territories, taking into account the dynamics of positive and negative factors affecting the target indicators.

**Findings**

The performed monitoring of the achievement of target indicators in the whole of the Russian Federation and the analysis of the first results of the Strategy implementation allow us to conclude the following.

Not all the information necessary to assess the actual levels of target indicators is contained in the official publications of the Federal State Statistics Service of the Russian Federation. For example, there were problems collecting data to evaluate the indicator “Putting into operation midwife stations and (or) offices of general practitioners in rural areas”. Obviously, this problem is easily solved by implementing technical measures to collect, summarize and publish statistical data. It would be appropriate to introduce into the practice of the activity of RosStat the publication of thematic collections and bulletins on the progress in the implementation of the socio-economic strategies and national (state) programs adopted for execution.

The confirmation of the earlier conclusion that it was advisable to review the composition of the Strategy targets was found. Ideally, targets should satisfy a set of requirements (criteria), including, as noted in the Guidelines for the development and implementation of state programs, the requirement for the responsible executor, co-executors and participants in the implementation of the state program to have the necessary and sufficient resources to achievement of the set goals [9]. With a big stretch, it can be argued that this criterion is met by the indicator “The share of the rural population systematically engaged in physical education and sports” or the indicator “Growth rate of revenue from the sale of goods, products, work, and services of agricultural consumer cooperatives”.

Analysis of publicly available statistical information shows that there are multidirectional deviations from the expected indicators of the Strategy (Table 1).

**Table 1 – The first results of the implementation of the Strategy for the sustainable development of rural territories of the Russian Federation for the period until 2030**

Indicators	2014	2015	2016	2016, +, –	
				till 2015	To expected levels
The number of rural populations at the end of the year, thousand people	37020,9	36918,4	36802,6	-115,8	100,2
Life expectancy of the rural population, years	69,5	69,9	70,5	0,6	-0,5
Migration growth of the rural population, thousand people	-138	-53	-39	14	62
Index of agricultural production in farms of all categories (in comparable prices) to the previous year, %	103,5	102,6	104,8	2,2	1,7
The part of peasant (farmer) farms and individual entrepreneurs in the production of agricultural products, %	10,0	11,1	12,1	1,0	0,6
The employment rate of the rural population, %	60,6	60,7	60,7	0	-0,4
The ratio of wages in agriculture to the average value of the country's economy, %	54,5	58,0	59,3	1,3	6,8
The ratio of per capita disposable resources of rural and urban households, %	62,3	65,3	63,5	-1,8	-0,9
The total area of residential premises, falling on average per inhabitant in rural areas at the end of the year, m2	23,3	25,8	24,9	-0,9	-1,2
The proportion of the total area of residential premises in rural areas equipped with all types of landscaping, %	28	31	32	1	3

The rural population was decreasing at a slower rate than expected, which was largely influenced by the over-planned migration growth. In 2016, there was a noticeable increase in agricultural production against the background of the approach of the level of wages in agriculture to the average value for the country's economy. The proportion of the total area of residential premises in rural areas equipped with all types of amenities has increased.

However, despite the increase in life expectancy, the actual level of this indicator is still behind the target in the Strategy. Also, below the expected level is rural employment. The ratio of per capita disposable resources of rural and urban households worsened [2,3,6]. The total area of residential premises, falling on average per inhabitant in rural areas, decreased in 2016 compared to 2015 by 0.9 m<sup>2</sup> and fell below the target level by 1.2 m<sup>2</sup>.

Monitoring and analysis of development indicators of rural territories in the whole of the Russian Federation needs to be reinforced and developed. Of greatest practical interest is the regional aspect. The value of monitoring consists, first of all, in that control actions are developed based on its results. The effectiveness of rural development management will always largely depend on how local conditions and the functioning of the agricultural economy are taken into account. Since there are significant differences between the regions of the Russian Federation in the achieved level of development of rural territories, in the existing potential and in the rational trajectory of this development, for full monitoring it is necessary to develop regional strategies for the sustainable development of rural territories.

The indicators of regional strategies should include a mandatory set of federal indicators and a set of indicators relevant to the conditions of a particular region. The first will make it possible to coordinate and evaluate the activities of regional authorities and administrations in the implementation of federal imperatives. The second is to concentrate efforts on solving specific problems that impede the sustainable development of rural territories of specific regions.

So, P.E. Podgorbunskih and S.G. Golovina draw attention to the need in the conditions of the Kurgan region to monitor the ecological state of rural territories [11]. O.V. Abramov believes that the sustainable development of rural territories is hindered by the low entrepreneurial activity of the rural population, which entails insufficient security of the budgets of rural territories. To overcome this trend, the Department of Economic Development of the Belgorod Region plans in two years to create at least 500 small industrial enterprises in the region with an employment of up to 10 thousand people [1].

The contribution of regional subjects of governance to measure the development of rural territories should be measured taking into account the achievement of only effective indicators characterizing the significant socio-economic aspects of the state of rural territories. The number of such indicators should be limited, and their content should reflect the interests of the main subjects of rural development: the state (national interests); rural residents (dominant personal interests of citizens); business structures (commercial interests).

In this case, it is important to solve the problem of ambiguity in the measurement of indicators. The Guidelines on the development and implementation of state programs of the Russian Federation raise the question of the objectivity of indicators: it is not allowed to use indicators (indicators), improvement of reporting values of which is possible if the real situation worsens [9]. This decision seems to us too radical and not suitable for all cases. For example, to exclude the indicator "The total area of residential premises, per average inhabitant in rural areas at the end of the year, m<sup>2</sup>" from the strategy or program for the development of rural areas only because its level can increase due to a decrease in the population, we consider it inappropriate.

The solution to the problem lies in the analysis of factors affecting the change in the level of the indicator. In the general case, the change in the area of residential premises, per average per inhabitant in rural settlements, depends on the change in the total area of residential premises and the number of rural residents. The absolute chain growth of this indicator can be calculated by the formula

$$ACG = \frac{S_1}{H_1} - \frac{S_0}{H_0}, \quad (1)$$

where ACG is the total absolute chain growth, m<sup>2</sup> / person.; S<sub>1</sub> - total living area in rural areas at the end of the reporting year, thousand m<sup>2</sup>; S<sub>0</sub> - total living area in rural areas at the end of the year preceding the reporting year, thousand m<sup>2</sup>; H<sub>1</sub> - the number of rural residents at the end of the reporting year, thousand people; H<sub>0</sub> - the number of rural residents at the end of the year preceding the reporting year, thousand people.

The components of the total growth are growth due to changes in total living space (GSG) and growth due to changes in population (GPG):

$$ACG = GSG + GHG. \quad (2)$$

The indicated components are calculated by formulas (3) and (4).

$$GSG = \frac{S_1 - S_0}{H_1}, \quad (3)$$

$$GHG = \frac{S_0}{H_0} \times \frac{H_0 - H_1}{H_1}. \quad (4)$$

The calculation results for the above formulas are presented in table 2.

**Table 2 - Absolute chain growth of living space per one villager and its components (at the end of the year as a whole in the Russian Federation), m<sup>2</sup>**

	Years		
	2015	2016	2017
Growth over the previous year, total (ACG)	2,46	-0,85	-1,07
including due to changes in total living area (GSG)	2,40	-0,93	-1,22
due to changes in population (GPG)	0,06	0,08	0,15

The data in table 2 indicate that the absolute chain growth of living space per inhabitant mainly depends on changes in the total living space. The change in population has a negligible effect, but it is gradually increasing. A more in-depth analysis should be aimed at finding out why the changes in the total living space and population have occurred. For example, in 2016, the decrease in total living space is explained by the relocation of more than 20 thousand rural residents from dilapidated residential buildings.

A somewhat different methodological aspect is the comparison of the achieved and expected (programmed) levels of provision of rural residents with living space. When comparing the achieved level of the analyzed indicator with the level indicated in the Strategy, it should be taken into account that a decrease in the rural population is an expected phenomenon. The programmed decrease in the rural population reflects the target levels of the indicator "The number of rural populations", indicated in the Strategy.

By analogy with the case considered above, the deviation of the actual level of the indicator from the target level can be represented by the formula (5):

$$DTL = \frac{S_r}{H_r} - \frac{S_t}{H_t} = \frac{S_r - S_t}{H_r} + \frac{S_t}{H_t} \times \frac{H_t - H_r}{H_r}, \quad (5)$$

where DTL - deviation of the actual level of the indicator from the target level, m<sup>2</sup> / person.; S<sub>r</sub> - actual total living area in rural areas at the end of the year, thousand m<sup>2</sup>; S<sub>t</sub> - the target total living space in rural areas at the end of the year, thousand m<sup>2</sup>; H<sub>r</sub> - the actual number of rural residents at the end of the year, thousand people; H<sub>t</sub> - target number of rural residents at the end of the year, thousand people

The indicator "Total living space in rural settlements" is not among the indicators of the Strategy, but it can be calculated from the indicators "The number of rural population" and "Total area of living quarters per average inhabitant in rural settlements" presented in it.

The performed calculations by the formula (5) are presented in table 3.

**Table 3 – Deviation from the target level of the actual size of the living space per one villager and its components (at the end of the year as a whole in the Russian Federation), m<sup>2</sup>**

Indicators	Years			
	2014	2015	2016	2017
Actual level	23,34	25,80	24,95	23,88
Target level	25,10	25,60	26,10	26,50
Deviation from the target level	-1,76	0,20	-1,15	-2,62
including due to changes in total living area	-1,69	0,28	-1,08	-2,63
due to changes in population	-0,08	-0,08	-0,07	0,01

The structure of the deviation of the analyzed indicator from the target level indicates the predominant effect on the provision of housing with changes in the size of the total living space. Until 2017, the excess of the actual rural population over the expected one had a "negative" effect on the level of housing provision. At the end of 2017, the rural population became smaller than planned in the Strategy, which led to some overstatement of housing provision compared to the level expected in the strategy.

As a result, the analysis of the structure of absolute chain growth and deviations of the actual level of the indicator from the target level allows us to overcome the problem of the ambiguity of measuring composite indicators, the improvement of reporting values of which is possible if the real situation in other areas worsens.

**Conclusions**

Monitoring the achievement of targets serves as an effective tool for managing the socio-economic development of rural areas. In conjunction with the analysis of the dynamics of actual levels and their deviations from the target values of strategic (program) indicators, monitoring allows us to evaluate not only the results obtained taking into account the factors influencing them, but also the content of program documents, forming an analytical base for updating and improving the latter.

The effectiveness of monitoring the sustainable development of rural areas can be significantly improved by including regional information in the subject area. It seems appropriate to carry out the following actions for this: 1) to adjust the composition and content of indicators of the Federal Strategy taking into account the constructive proposals of scientists and specialists; 2) allocate a list of indicators that are mandatory for inclusion in regional strategies as part of the indicators of the Federal Strategy; 3) to develop and adopt regional strategies for the sustainable development of rural territories; 4) organize monitoring on a new regulatory basis.

When selecting targets, a set of criteria should be used, the main of which are focus on the interests of the main subjects of rural development, attainability and measurability. The exclusion of an indicator that meets these criteria, but does not satisfy the criterion of objectivity, is permissible only if there is no way to overcome the problem of the ambiguity of the indicator.

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