

Evaluating the effectiveness of programs for the agricultural sector support at the regional level

Lyudmila Medvedeva^{1*}, *Karine Barmuta*¹, and *Lyudmila Fedoseeva*¹

¹Don State Technical University, Gagarin sq.1, 344002 Rostov-on-Don, Russia

Abstract. The programs for state support of agricultural sector development are implemented in all regions, but their effectiveness depends on many factors that need to be assessed. Based on the data obtained, the complex policy of sectoral development should be adjusted. In the article, the regional programs for agricultural sector development for a number of periods are explored in detail, and the most promising practices are highlighted. Comparative analysis is conducted for different territories, which helps to build a methodology for evaluating the effectiveness of programs using indicators suitable for conducting regional comparative analysis. The study identifies risks that affect the effectiveness of the program and suggests measures to mitigate them. In conclusion, the algorithm of the comprehensive methodology for assessing the effectiveness of regional programs for agricultural sector support is developed.

1 Introduction

In the terms of current socio-economic uncertainty, the need to adjust and improve programs for supporting economic entities operating in the agricultural sector is increasing. It is necessary to evaluate the effectiveness of current initiatives providing support to the agricultural sector and use the findings obtained to adjust the areas of development.

Regional support programs for companies that operate in the agricultural sector include different areas, namely financial, infrastructural, information [1].

In this research, the primary goal is to develop methodological tools for evaluating the performance of regional initiatives in the field of supporting the agricultural sector development [2].

Domestic and foreign scholars are involved in the discussion on evaluating the effectiveness of support programs for entities operating in the agricultural sector. Their studies are dedicated to the problems of developing methodological toolkit for identifying and evaluating causal relationships using comprehensive approach in order to adjust regional initiatives based on the findings. Some areas of the methodology require adjustment, which is emphasized in this study [3,4].

2 Materials and methods

* Corresponding author: milla1988@mail.ru

In order to identify areas for the development of methodological tools for evaluating the effectiveness of regional initiatives aimed at supporting the agricultural sector, initial information should be gathered (data on regional support programs for agricultural sector development). The existing methodological toolkit should be critically evaluated, and directions for its development should be identified to conduct comparative analysis and identify risks, along with measures to mitigate them, as part of the assessment process.

This research utilized horizontal and vertical analysis tools, the index method, calculation of averages, and other analysis methods. The article explores socio-economic phenomena and processes using the monographic method, forecasting and economic-mathematical modeling.

3 Results and discussion

The article is based on the following stages:

- exploring and grouping the declared results of the implementation of regional support programs for companies operating in the agricultural sector,
- carrying out comparative analysis of programs in various regions,
- studying and analyzing methodological tools used to evaluate the effectiveness of regional initiatives in the field of agricultural sector support,
- identifying the areas for methodological toolkit development.

Let us consider each stage in more detail.

The agricultural sector development in the Russian Federation has been receiving special attention for a long period of time, which is reflected in the development and implementation of programs for supporting priority activities of agricultural companies.

Support for agricultural organizations' activities is currently provided through long-term programs, which include:

- identification of opportunities for achieving sustainable and comprehensive development of rural areas, as strategically important for agricultural activities,
- development and stimulation of the activities of small agricultural businesses in the regions,
- development of specific sectors of the agriculture (with particular attention paid to crop production, animal husbandry, viticulture and winemaking),
- creation of conditions for cooperation of agricultural producers, farmers,
- increasing the investment appeal of agricultural sector,
- creation of conditions for improving the suitability of agricultural land [5-7].

The program for agricultural sector development and regulation of markets of agricultural products, raw materials and food, which is currently being implemented in the Rostov region, includes a subprogram that is focused on the development of different sectors of agriculture. It is noteworthy that in other regions of the Southern Federal District, namely the Astrakhan region and the Krasnodar region, these initiatives are also approved and implemented. We deem it necessary to present a comparative analysis of the results that are claimed to be achieved upon the implementation of program activities (Table 1). Comparative analysis helps to identify differences in the indicators that are included in the results of agricultural sector support, which can reflect the differences in the methodological tools needed to evaluate programs effectiveness in the region. Let us also emphasize the fact that subprograms are implemented in all regions, but they have different structure. Besides, in one region, targets are used based on activities, while others apply effective indicators.

Table 1. Comparative characteristics of the results claimed in the regional programs for the development of branches of agriculture

Effective*/target indicator	Regions/ (+ the indicator is claimed, - the indicator is not claimed)		
	the Rostov region	the Krasnodar region	the Astrakhan region
Sustained growth in animal and crop production*	+	+	+
Profitability of agricultural producers	-	+	-
Increase in capacities and production volumes in the field of processing agricultural products*	+	-	+
Increase in profitability of agricultural products*	+	+	+
Production modernization and, as a result, an increase in competitiveness and quality of agricultural products*	+	+	+
Increase in the number of livestock of agricultural animals*	+	-	+
Increase in revenues of agricultural producers*	+	+	-
Job creation in the agricultural sector*	+	-	+
Reduction of the risk of livestock animals' death*	+	-	-
Number of (peasant) farms		+	+

Programs for agricultural sector development in the regions actually share common goals and objectives, which form the basis of the effective and target indicators. However, the comparative analysis showed that the list of indicators is different in various regions. On the one hand, there is a different sectoral detailing, which certainly is a very significant factor. On the other hand, it was revealed that different indicators form the basis of the assessment.

The lack of uniformity in the key indicators used to evaluate the results of programs and subprograms for agricultural sector development poses certain problems which can reduce the quality of evaluating the effectiveness of state support program implementation.

Next, we deem it necessary to consider the existing and currently used tools for evaluating the effectiveness of support programs. These methods are compulsorily reflected in the government resolutions in the region and are updated taking into account the changes of state development programs. Let us also consider the assessment methods which are approved in the Astrakhan region, the Krasnodar region and the Rostov region (the Southern Federal District).

In the Rostov region, the current methodology for evaluating the effectiveness of state programs was approved back in 2018 with modifications introduced in 2022. The methodology is based on a step-by-step actual assessment, which is carried out during the analysis of the program implementation effectiveness and involves:

- indication of the estimated resources expended in the course of the program implementation,
- assessment of risks which affected the effectiveness of the program implementation,
- identification of the socio-economic impact of the program, which is also reflected in the change in the development indicators of the entire region.

Let us consider the basic stages of evaluating effectiveness of support programs in Figure 1.

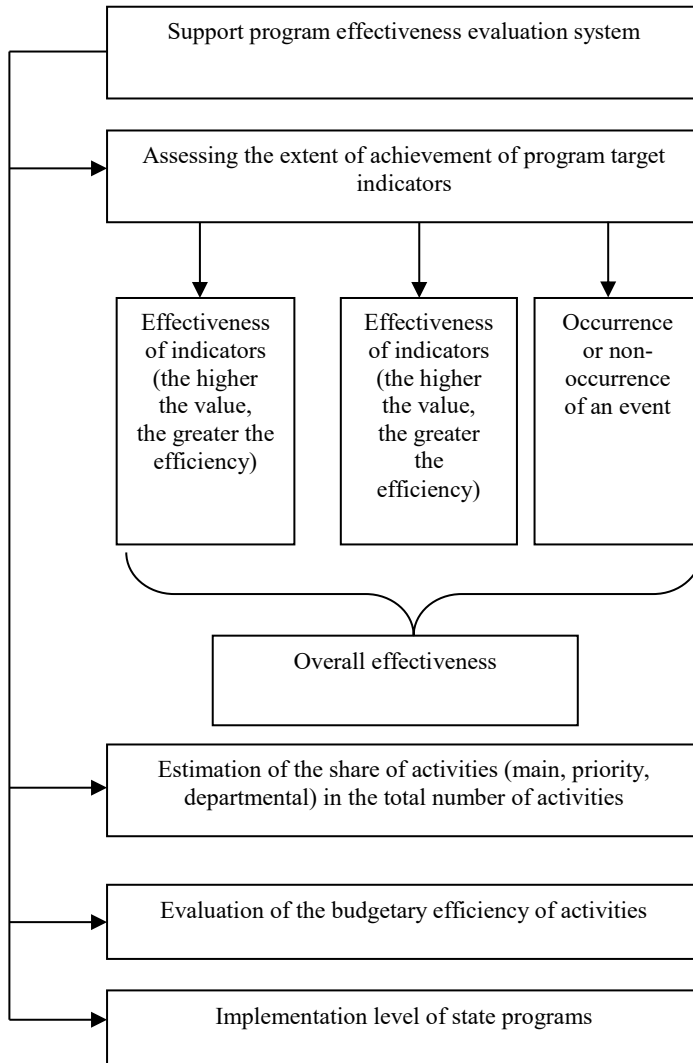


Fig. 1. Stages of evaluating the effectiveness of state support programs in the Rostov region, *Source: summarized by the authors based on the Government Resolution*

In the system of evaluating the effectiveness of the implementation of state support programs in the Rostov region, the key focus is made on assessing the extent of target indicators' achievement, the implementation level of the main activities declared and bringing effects in the course of implementation, as well as on the analysis of budgetary efficiency.

Now let us consider the methodological tools which are used in the process of evaluating the effectiveness of state support programs for agricultural companies on the example of the Astrakhan region (Figure 2).

The procedure for evaluating the effectiveness of the implementation of state support programs in the Astrakhan region was developed in 2014, updated in 2021 and includes the approved quantitative and qualitative indicators for comprehensive assessment of the results of programs' implementation. The final outcome of the program evaluation should include:

- social outcome,
- budgetary outcome,
- commercial (financial) outcome,
- direct outcome.

Let us consider the basic stages of the methodology for evaluating the effectiveness of state support programs in Figure 2.

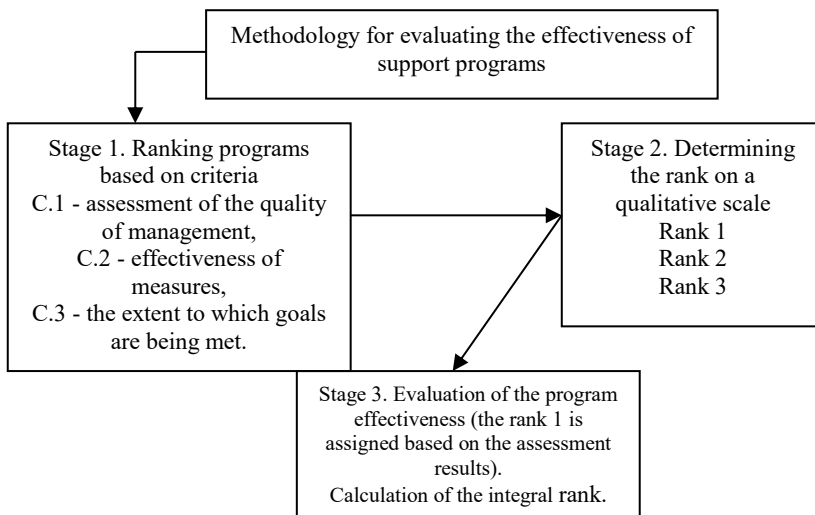


Fig. 2. Methodological tools for assessing the effectiveness of state support programs in the Astrakhan region, *Source: summarized by the authors based on the Government Resolution*

The effectiveness evaluation method presented allows for an accurate determination of the level of funding for state programs formed from the regional budget.

Let us consider the features of evaluating the effectiveness of programs in the Krasnodar region. It should be noted that in this region target indicators are used to assess the effectiveness of programs. In the Krasnodar region, evaluation of the effectiveness of programs is carried out annually. The program coordinator is appointed responsible.

Evaluation of the effectiveness of state programs is carried out in the following stages:

- assessing the degree of compliance with the planned level of expenditure,
- analyzing the effectiveness of the use of financial resources,
- assessing the extent of achievement of goals and objectives of subprograms and departmental targeted programs included in the state program,
- assessing the extent of achievement of goals and objectives of the state program.

In general, the stages of the effectiveness evaluation are quite similar to the methodological tools used in the Rostov region. However, the Krasnodar region does not focus on assessing the budgetary effectiveness of activities.

Thus, in the study, the experience of different regions in the field of evaluating the effectiveness of the implementation of state support programs was explored in detail. It was revealed that although there is a need to consider the risk factor, in practice no such assessment is conducted in the regions under study.

For these reasons, we consider it necessary to adjust the methodology for evaluating the effectiveness of state support programs using the following algorithm:

- defining the key indicators to be included in the program passport,
- assessing the effectiveness of achieving the stated key indicators and reflecting the dynamics of achievement,
- identifying the factors which influenced the failure to achieve key indicators and assessing the risk of preserving this trend,
- ranking the indicators,
- calculating the integral indicator of evaluation.

4 Conclusion

Thus, the conducted research determined the directions for the development of methods for evaluating the effectiveness of state programs in the field of agricultural sector support, which are shown in a step-by-step algorithm developed based on the study of the best regional practices for assessing the effectiveness of state support programs.

Positive results of state support programs' implementation will be achieved when the factors which influenced the key indicators of the program are identified with the use of qualitative analysis.

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