

Competitiveness of rural areas: formation, assessment, growth reserves aspects

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Abstract. New models for organizing agricultural production and management are the basis for the stability of rural development trends in the long term. The study presents the main directions of improving institutional environment of government, business structures and population in order to ensure the economic growth of agro-industrial complex and rural territories. The authors propose to consider changes in the methodology for assessing the organizational and economic potential of rural development as a direction for improving the system of managing rural areas. The authors consider the algorithm for assessing the rural territories development, which include characterizing certain aspects of rural territories socio-economic development, their comparative analysis, integrated assessment, selecting factors of changes in the rural territories socio-economic development and forecasting the parameters of this development. The degree of effective interaction between the subjects made it possible for the authors to highlight two basic models of interacting between state power, business and population of the territory: territories with great growth potential and territories in which there are significant reserves for growth in this direction and territories for which it is important to mobilize the state's efforts and the private sector in order to search for innovative sources of development stimulation and the population life quality.

1. Introduction

Global challenges result in the necessity to develop a competitive economy that can withstand the negative effects of economic risk.

The existing theoretical approaches that explain the principles of rural development currently fail to react to the challenges; therefore, the corresponding development programs developed in the regions are not rewarding [1, 2].



As a rule, strategies for increasing the rural areas competitiveness are aimed at forming and keeping competitive advantages ensuring a stable and profitable position of the territory in the long term, and at minimizing the negative impact of environmental threats and internal risks [3, 4].

Analyzing the existing classifications of strategies for improving the rural areas competitiveness revealed that their development and implementation is a labor intensive process that requires systematic monitoring of both internal competitiveness factors characterizing all areas of the territory economic activity and external factors justified by the economic agents influence and the economic system of territory activity [4, 5].

The development of methodological foundations and mechanisms for implementing rural territories sustainable development makes it necessary to objectively assess the degree of the factors influence on the rural territory level of competitiveness, to consider the values of the economic activity main parameters and the regional economic system influence will make it possible to increase the effectiveness of new strategies in order to increase the territories competitiveness [5].

2. Problem Statement

The competitiveness management of rural territories is carried out within the framework of the existing institutional environment and is implemented through the influence of certain mechanisms that are activated by the competent control centres of various levels (federal, regional and municipal) [1, 2].

The key problem is to coordinate the state and dynamics of the regional institutional environment and functioning of the mechanisms for the rural territories development initiated by the management centers at the municipal level. The task of managing the rural areas sustainable development cannot be solved without modernizing the institutional infrastructure, which includes relations between all stakeholders at the regional level [1].

To develop methodological foundations and a mechanism for implementing rural territories sustainable development, it is necessary to specify the systemic factors of the institutional environment for implementing the competitive development strategy (table 1).

Table 1. Factors affecting the territory competitiveness.

Micro level	Meso-level	Macro level
- management of the territory; - geographical position; - labor resources; - natural resources; - investment attractiveness; - innovation; - infrastructure; - industry structure, etc.	- relationships with outside vendors of goods and services; - relationships with outside consumers; - relations with competing regions; - relations with financial organizations; - logistics, etc.	- the international cooperation; - the economic environment in the country; - political situation in the country; - money-credit policy; - fiscal policy; - inflation rate; - refinancing rate, etc.

Competitive potential is formed under the influence of various factors and is the basis for implementing the rural territories competitive policy [6, 7].

The analysis of the factors affecting the territory competitiveness makes it possible to clarify the content and structure of the elements of the rural areas competitive potential, as well as to determine the system of socio-economic indicators. The key indicators characterizing organizational and economic potential of the rural development are the characteristics of a quantitative justification of the methodology for assessing the rural territories competitiveness.

3. Research questions

The rural areas competitiveness varies under the influence of various factors. The factors beneficial effect is transformed into the territory competitive advantages, and the negative one hinders its development. In this regard, the authors propose to distinguish 2 criteria when classifying the factors: the influence level and the possibility to form potential competitiveness [7].

The analysis of the agro-industrial complex of industrial-type regions made it possible to specify the factors significantly hindering the development of agricultural industries. These factors include the following indicators: low percent of the rural population, insufficiently favorable environmental situation, and insufficient basic production assets. Moreover, regional development processes in the Russian Federation are characterized by significant heterogeneity. The subjects of the Federation vary significantly in terms of socio-economic development; productive forces are unevenly distributed across the territory of the Russian Federation. The objective climatic, geographical, natural conditions of the subjects, their human capital assets and historical patterns determine the economic sectors growth prospects. In this context, forming the rural areas competitiveness is aimed at creating and maintaining a financially stable position of the rural territory in the current conditions of functioning.

Sustainable development of a rural territory is a change in the basic parameters of its state in terms of improving relations between the main participants of the business environment in the economic sphere, increasing business social responsibility and also meeting environmental safety requirements when using local natural resources [7, 8].

The entrepreneurial rural climate is the basis of competitiveness and is a combination of conditions that determine the emergence of national environment. The more favorable the entrepreneurial climate in this rural area is, the higher will be the final economic result of agribusiness activity and its competitiveness level [4, 9].

4. Purpose of the study

The practical importance of managing agribusiness competitive advantages and the insufficient scientific study of certain aspects of managing the rural competitiveness, makes it necessary to develop methodological foundations for assessing the rural socio-economic situation in the subjects of the Russian Federation in relation to other entities.

This methodology makes it possible to assess the overall potential of a particular territory and carry out a comparative analysis of rural areas, in order to identify conditions for the competitiveness indicators growth.

Achieving the goal of the study presupposes solving a number of tasks [3, 7]:

- to characterize the territory competitiveness;
- to identify the factors affecting the competitiveness level;
- to substantiate the process of forming rural competitiveness, taking into account the potential of the territories;
- disclose the content and structural elements of the rural competitive potential;
- to develop a methodology for assessing competitiveness on the basis of the system of indicators, which characterize the organizational and economic rural development potential.

5. Research methods

When carrying out the research, the authors use general scientific methods of economic research: a monographic review, methods of a program and strategic approach, methods of economic and mathematical calculations.

As a tool for obtaining information in order to make a reasonable strategic management decision in the field of sustainable development of territories, the methods of the program approach and the economic and mathematical apparatus are considered.

The methodology for studying the processes of sustainable rural development is based on the unity of ideas, firstly, the cyclic-wave methodology, secondly, the methodology of structural analysis and thirdly, the methodology of economic growth, each of which has its own patterns, nature, objects, results, recommendations [10].

The cyclic-wave methodology involves the study of:

- the nature, laws, factors of the rural economic dynamics in the spatial dimension;

- scientific tools and a set of indicators of the emergence and development of wave and cyclical processes in the economic rural development, as well as in agricultural production;
- the cyclical nature of agricultural production development in developed countries and their regions;
- the relationship between economic crises (and overcoming them) and the processes of economic space development of the country, territories;
- industry priorities for the deployment of technological processes in the economic space of the country and rural territories, taking into account the challenges of the fifth and sixth technological modes.

The methodology of economic growth includes the study of:

- the relationship between the processes of achieving a new quality of economic growth of the country and territories;
- the relationship between the level of agricultural production technological development and the economic growth of the country and territories;
- new trends in the pace of economic dynamics of developed countries and their regions.

The methodology of structural analysis is based on the relationship between:

- the growth (fall) of agricultural economy and changes in the economic structure of the country and territories;
- fluctuations in the economic situation and changes in the economic structure of the country and its regions;
- the level of economic development of the country and territories with the technological structure of agricultural production causing a cumulative, synergistic effect;
- new industries as a result of deployment and innovation processes, diversification of agricultural economy.

The methodologies complement each other in the framework of economic development research.

6. Findings

The increased competition of goods and services of various markets has aggravated the necessity to study the main characteristics of competitive development, as well as areas for more efficient management of strategies for sustainable rural competitiveness in the economic system. A strategic approach to managing the rural competitiveness presupposes making decisions on the basis of the analytical work results, which makes it possible to determine its level.

The competitiveness level forms the competitive rural potential, its use and management [7].

The competitive position is formed under the influence of a set of elements of the organizational and economic potential of the territory development, which is an internal component of the territory socio-economic system [12].

The potential is fundamental and determines the result of various factors effect, which determines the system of indicators build in the assessment methodology [7, 12].

The effective management of quantitative and qualitative properties (possibilities) of rural areas will result in increasing the standard of living of the rural population. Competitive potential has a complex structure consisting of the following elements: economic potential, organizational capacity, infrastructure potential, investment potential, Innovation potential, human potential, educational and scientific potential, environmental potential.

The methodology for assessing the territory competitiveness is based on a quantitative analysis of the basic structural elements of potential, which gives an objective idea of the rural competitiveness level, factors constraining its development, and available growth reserves.

The main tasks solved in the course of determining the assessment are:

- diagnosing the territory current state and comparing it with similar objects;
- identifying the growth reserves of the achieved level.

The methodology for assessing the territory competitiveness is carried out according to the following algorithm (table. 2).

Table 2. The sequence of assessing the territory competitiveness.

Algorithm sequence	Stage Content
1. Collecting and studying the information base for assessment	Forming a system of specific indicators characterizing the rural competitive potential.
2. Calculating and assessing specific competitiveness indicators	Standardization of indicators to achieve comparability
3. Calculating the total competitiveness coefficient	Summarizing the results of rural competitiveness assessment.
4. Identifying areas for improving the rural competitiveness according to the assessment results	Identifying factors restraining and stimulating the territory development.
5. Implementing management decisions and controlling over their implementation	Developing various options for management decisions. Choosing the best option.

The quantitative expression of the competitive potential structural elements reveals each direction from the essential side and, in the aggregate assessment, characterizes the rural competitiveness in general [7, 13].

A quantitative assessment of the considered elements of competitive potential is determined in the form of particular indicators values. The specific indicator is calculated as the ratio of the actual value of the surveyed territory indicator and the maximum value of this indicator for a sample of territories:

$$x_{ij} = \frac{a_{ij}}{\max a_{ij}}$$

Where a_{ij} is the standardized indicator level in the i-th territory; a_{ij} is the current level of a specific territory indicator; $\max a_{ij}$ is the maximum value for the compared indicator.

The integration of all specific indicators for each structural element of competitive potential is determined by the formula:

$$K_n = \frac{\sum_{j=1}^n x_{ij}}{n}$$

where n is the number of indicators.

On the basis of the K_n indicator, the total competitiveness coefficient K_{kp} is calculated:

$$K_{kp} = \sqrt[8]{K_{\text{en}} \times K_{\text{mn}} \times K_u \times K_{\text{инв}} \times K_{\text{инф}} \times K_{\text{э}} \times K_{\text{опз}} \times K_{\text{он}}}$$

The calculated values of K_{kp} for each territory makes it possible to rank them according to the level of competitiveness into 5 groups (table 3).

Table 3. Grouping territories by competitiveness level.

Group boundaries	Competitiveness characteristics
$0,8 < K_{kp} \leq 1$	Territories with the highest level of competitiveness (benchmark parameters for the indicators under consideration) are characterized by the effective use of competitive potential.
$0,6 < K_{kp} \leq 0,8$	The level of competitiveness is above average; the territory has sufficient competitive potential, but it is not fully involved.
$0,4 < K_{kp} \leq 0,6$	The average level of competitiveness, the territory is characterized by the development of only a certain part of the competitive potential.
$0,2 < K_{kp} \leq 0,4$	Competitiveness is below average, the territory is characterized by low competitive potential and lack of growth reserves.
$0 < K_{kp} \leq 0,2$	Critical (crisis) level of competitiveness.

The quantitative assessment of the territory competitiveness level of the Kyrgyz Republic is the basis for determining areas for a more intensive use of the rural competitive advantages and weakening (eliminating) the factors that have a negative impact.

7. Conclusion

The proposed methodology for assessing the rural competitiveness has the following positive characteristics: accessibility of the information base for assessing; a systematic and integrated approach to studying such a complex phenomenon as the rural competitiveness; the assessment is comparative, which makes it possible to determine the position of the territory in relation to the comparison base; the study takes into account real achievements of the studied territories; the system of indicators used in the assessment makes it possible to identify the most optimal reserves for competitive growth; it is a labor-saving calculation process.

The considered technique also makes it possible to obtain a generalized characteristic of the rural competitiveness in certain areas. The practical significance of assessing the territory competitiveness is the following: the results of the analysis are a key source of information used by authorities in developing management decisions, the implementation of which will result in increasing the level of the territory development in the social and economic areas [7].

References

- [1] Kumaneeva M K 2014 Forming criteria for sustainable development of industrial type regions *Young Russia: Collection of writings of VI All-Russian 59th scientific-practical conference of young scientists with international participation* Advance online publication. https://elibrary.ru/download/elibrary_22759207_12555367.pdf.
- [2] Smirnov V V 2015 Food security of the Russian Federation's regions *Journal "National Interests: Priorities and Security"* **3(288)** 19
- [3] Isaeva O O 2018 Organization of monitoring in the system of managing sustainable development of rural territories *Abstract of the thesis for a Candidate Degree in Economics* 26
- [4] Platonova T K 2019 *Forming a strategy to improve business competitiveness in the economic system of a region* (Publishing house of FSBEI of HE "Chechen State University")
- [5] Kokovin P A and Mezenina O B 2015 Criteria for a comprehensive assessment of regions socio-economic development *Bulletin of Bashkir State Agrarian University* **4(36)** 123-7
- [6] Zubaydullina D V 2019 *Improving the management of regional development on the basis of harmonizing interaction between state power, business and population* p 22
- [7] Kagarmanova A B 2019 *The competitiveness of the region: formation, evaluation, reserves of growth* (Publishing House of the Institute for Problems of the Regional Economy of the Russian Academy of Sciences)
- [8] Burmatova O P 2019 *Forecasting the development of territorial environmental and economic*

- systems, in the context of forming a management mechanism p 27*
- [9] Velichenko E A 2018 *Improving the tools of indicative planning and forecasting the regions socio-economic development* (Makhachkala: Publishing House of FSBEI of HE "Dagestan State Technical University")
- [10] Davydov S Y, Semin A N, Valiev N G, Gorbunov A V and Oleinikova L N 2016 Energy conservation technologies in the use of a power-driven covering apparatus in industry refractories and industrial ceramics *Springer New York consultants bureau* **5** 461- 4
- [11] Khilinskaya I V 2018 *Organizational and economic potential of rural development* (Yekaterinburg: Printing house "Photokhudozhnik")
- [12] Mekush G E 2000 Approaches to working out indicators of sustainable development at the regional level *Geography and natural resources* **6** 18
- [13] Dykan Yu A 2019 *Priority directions of sustainable development of rural territories* (Voronezh: Voronezh State Agrarian University)

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