Problems of sustainable economic development in modern conditions

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Abstract. Solving the problems of sustainable economic development and improving the standard of living and well-being of the population in Russia is largely due to increasing the effectiveness of the system of strategic planning and management of socio-ecological and economic development of regions. For many years, the priority direction in the rural economy of the country has been the sectoral agrarian approach, including in areas with limited resource potential. This did not contribute to a breakthrough in the development of agriculture due to the destruction of established principles and relationships. Particular attention should be paid to the problem of infrastructure development in rural areas, economic entities engaged in the processing and sale of agricultural raw materials and products, local crafts and rural tourism, services.

1 Introduction

Despite the fact that effectively functioning subjects of the agro-industrial complex contribute to fuller employment of the population, contribute to improving food security and stability of the regions’ economy, it is currently impossible to fully solve the entire complex of socio-economic problems of rural areas.

Therefore, the priority goal of regional policy in modern conditions is to increase the efficiency of the using economic and resource potential, structural transformation in the economy of agrarian-oriented regions, creating conditions for rapid adaptation of economic entities to rapidly changing conditions, attracting large investments in rural areas to accelerate the growth rate of rural economy development. Other, in our opinion, equally important tasks are to reduce the intensity of migration processes. To do this, it is necessary to develop the market for the provision of services in the social and industrial spheres in rural areas \cite{1,2}.

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2 Materials and methods

Ensuring high rates of rural growth only through more efficient redistribution and use of Russian resources should not be seen only as a desire for isolation and self-sufficiency. This direction of development is labor-intensive, requires the mobilization of efforts for all participants in the process and can be achieved as a result of increasing the competitiveness of agricultural products and enterprises processing agricultural raw materials in the food markets, both internal and external.

The methods of stimulating the development of rural economy and infrastructure include: direct government regulation, methods of stimulating the services market, creating conditions for the development of small and medium-sized businesses, the creation of special economic zones. The using the whole range of methods will also solve the problem of employment and reproduction of labor resources in rural areas [3,4].

An important prerequisite for the development of a unified strategy for the development of rural areas is the creation of a single objective information database for all administrative units, primarily including information on the size and structure of the population, the state of the economy, the social sphere and the welfare of citizens, the provision of natural resources. At the same time, the methods of collecting and analyzing information must comply with international standards. On the basis of objective and timely information received, the main provisions of the strategy for the development of rural areas and regions should be developed.

When studying rural areas from the point of view of their functions, they should be considered from the point of view of a systematic approach. Therefore, in the economic scientific literature, rural territory is usually understood as a socio-economic spatial integrity characterized by a certain structure of productive forces, the presence of all organizational and legal forms of management and ownership, population concentration, working conditions and standard of living of the population, which are managed directly and (or) through elected local self-government bodies. In the Sustainable Development Concept of rural territories in the Russian Federation, the concept of rural territory is considered from the standpoint of the territorial approach as a combination of rural settlements and inter-settlement territory (located outside the boundaries of settlements). At the same time, scientific knowledge needs to be more clearly defined.

The program-target approach reflects the concept of consistent selection of goals, subgoals and tasks of socio-economic development of rural areas; identification of ways and tools to achieve; balanced allocation of resources necessary for this; organization of effective interaction of participants and control. The disadvantages of the program-target method in solving the problems of sustainable development for rural areas can be noted: insufficient effectiveness, which is expressed in the fact that a significant amount of time passes from the moment the problem is identified to the moment of development and implementation of measures to solve it; there are no generally accepted and universally used tools for evaluating the effectiveness of the development and implementation of program measures for the development of rural areas territories; there is a discrepancy between the resources spent on different blocks of programs, which does not contribute to the successful implementation of rural development tasks [5,6].

To solve complex problems of rural development management, a systematic approach is actively used, which helps organizing the decision-making process at all levels of management, comprehensively assessing the level of rural development and the activities of the management system using specific characteristics, predicting the outcome of decisions, reducing risks and failures. Its positive role boils down to the fact that the concepts and principles of a systematic approach make it possible to identify more realistic opportunities for the development of rural areas in the unity of technical, economic, socio-psychological,
institutional, managerial and other aspects, while considering the presence of a significant number of lack of connections between objects, rapid variability of situations, limited resources.

At the present stage, the project approach has become widely used as a management technology in business and is currently being actively implemented in the state and municipal spheres. As a positive aspect of this approach, it can be noted that it not only helps to reduce the project implementation time due to the effectiveness of solving emerging problems, but also significantly saves resources. At the same time, the effectiveness of project management largely depends on the competence of the performers, as it requires certain knowledge in the field of economics, sociology, technology and other disciplines, there are certain problems in the interaction of structural units and performers.

Thus, at the present stage, in our opinion, the inconsistency of using one of the considered approaches in managing the development of rural areas to solve urgent problems formulated in the concept of their sustainable development is revealed. In this regard, it is necessary to use the positive qualities of program-targeted, systemic, project and strategic approaches that complement each other and form a new understanding of rural management in the long term.

This approach is due to the need for a comprehensive solution to the problem of rural development in close relationship with the leading sectors of the economy of an agrarian-oriented region and, above all, the agricultural sector. The transition to a new paradigm of sustainable development provides for the formation of a set of interrelated and interdependent environmental, economic, social, political and other processes based on the organization of such a system that would be able to resolve emerging contradictions between stakeholders. In this regard, currently the most important task of ensuring high rates of economic growth is the formation of a theoretical and methodological scientific basis for strategic planning and management of sustainable development. This process should begin with an understanding of the historical and regulatory prerequisites for the formation of such a concept of sustainable development, its basic principles and provisions [7,8].

3 Results

Over the past 25 years, a lot of work has been done in the country to form the necessary regulatory framework to support the development of rural areas within the framework of the agrarian policy of Russia. But the current state of the Russian economy requires effective business work to develop the country and reduce dependence on raw materials. One of the most important conditions for the effective operation of business structures is the availability of reliable, reliable and timely information. The availability of such data helps the business management to make informed management decisions and thereby increase the efficiency of the enterprise. Only the adoption of sound management decisions contributes to the successful development of the enterprise. After making a management decision, the process of its implementation follows. This becomes impossible without establishing control points at different stages of the implementation for a management decision. At the established control points, an assessment of the results achieved is carried out, deviations are calculated, and either an adjustment of the management decision or changes in the working conditions of the enterprise take place. The ultimate goal of implementing a management decision is to obtain the results defined in the Company's Development Strategy by performing the tasks set by the management of an economic entity to managers of different levels [9-11].

The enterprise management system is aimed at achieving the goals set by the management on the basis of the developed enterprise development strategy. However, the
planned state cannot always be reached at the required time, resulting in deviations. The analysis of deviations is carried out on the basis of data obtained as a result of the work of specialists of the company's internal control service.

Consider this problem on a concrete example of LLC “Galkinskoe” uses a linear-functional, or regular, management structure, which provides for the creation of a linear structure for functional units at the main links. The main role of these departments is to prepare draft decisions that come into force after approval by the relevant line managers. The organizational structure is characterized by composition and connections: at the enterprise – structural divisions; and is expressed in the form of an organizational structure diagram (Fig. 1).

![Management structure of LLC "Galkinskoe".](image)

Fig. 1. Management structure of LLC "Galkinskoe".

The average annual production volume in LLC "Galkinskoe" increased by 9.5 thousand rubles. Due to the increase in the number of days worked by a single employee, it increased by 82.2 thousand rubles. Due to a decrease in the length of the working day, i.e. an increase in downtime per shift, the annual production volume decreased by 69.7 thousand rubles. Due to a decrease in average hourly output, it decreased by 3 thousand rubles. Consider the efficiency of the staff at LLC "Galkinskoe" in the production of certain types of products (table1).
Table 1. Analysis of changes in the labor intensity of grain production in LLC "Galkinskoe".

<table>
<thead>
<tr>
<th>Products</th>
<th>2020 year</th>
<th>2021 year</th>
<th>2022 year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number of products, centner</td>
<td>labor costs</td>
<td>number of products, centner</td>
</tr>
<tr>
<td>Grain</td>
<td>1900</td>
<td>3.0</td>
<td>1.58</td>
</tr>
</tbody>
</table>

Strategic planning in LLC "Galkinskoe" is one of the most important conditions for its successful functioning. Without a strategic plan, the company faces uncertainty ahead. The company will carry out its activities based on the decision of the top management and considering external factors. In the course of strategic planning, the company's development goal is formed. If there is a set goal, the top managers of the enterprise make a set of decisions that are justified and aimed at achieving it.

In LLC “Galkinskii”, all areas of the company's activities are subordinated to the planning process: marketing (sales of products), production, financial issues and others. Plans for all of the above-mentioned areas of the company's activities are included in the strategic plan. During its implementation, all processes occurring at the enterprise are coordinated.

The planning system of the enterprise LLC "Galkinskoe" consists of separate subsystems:
- setting goals involving the definition of the company's policy, including the highest material, cost and social goals;
- capacity planning, which covers planning by types, facilities and structure of capacity;
- planning of processes and objects, within the framework of which the sequence of processes necessary to achieve the goal is determined in time and space, and the type and amount of use of subjects and volumes of resources in the relevant processes is established;
- planned calculations, which are a quantitative expression of planning.

The company does not set its main goal to obtain high profits, the main thing for LLC “Galkinskoe” is to strengthen its positions on the Russian market, improve the quality of its products, build its own ethylene production and an innovative way of development [12-14].

One of the main goals of strategic planning is that the company is going to invest its funds in the construction of its own raw material base.

In LLC “Galkinskoe”, with the strategic objectives set, there is a need to form a certain management system. A properly constructed management system will contribute to improving the efficiency of the enterprise. The implementation of the management system assumes timely receipt of information on the results of economic activity, and helps:
- to coordinate all operational and strategic planning processes at the enterprise;
- to monitor the work of departments and their managers at all stages of the implementation of tasks and, accordingly, to increase the responsibility of department heads for compliance with planned indicators;
- to ensure transparency of spending for department heads, in order to adjust expenses to achieve operational goals of production and marketing of products;
to plan and control the economic and financial flows of the enterprise as a whole.

To fulfill the designated tasks and ensure the sustainable operation of the LLC “Galkinskoe”, it was decided to create a system of flexible adaptive three-level planning:
  - the chosen strategy reflects the main directions of development;
  - according to the chosen development strategy, annual budgets are formed;
  - with respect to annual budgets, operational plans (budgets) for the month are formed;

In order to formalize the above-described planning system, four standards are provided for LLC "Galkinskoe":
1. Standard for the formation of the annual budget of LLC "Galkinskoe";
2. Standard of formation of the operational plan of LLC "Galkinskoe";
3. Standard of execution of the operational plan of LLC "Galkinskoe";

The financial structure of LLC "Galkinskoe" determines the composition, subordination, authority and responsibility of the cents of financial responsibility.

The main purpose of drawing up plans in LLC “Galkinskoe” is to develop a template of actions that will help management personnel to competently and fully use the resources available to the enterprise.

4 Conclusion

The main reserve for productivity growth of materialized labor can be a reduction in feed consumption per unit of output. In the medium and long term, as in crop production, labor productivity growth is ensured by improving production technology and increasing the level of mechanization of labor-intensive processes.

The realization of reserves for labor productivity growth in crop production and animal husbandry is possible when a clear dependence of the wage growth rates of the collectives of structural units on the growth rates of labor productivity is achieved.

The following indicators and bonus rates are recommended in LLC "Galkinskoe" in cattle breeding, which are tied to the consumption of feed per unit of production:

- if the consumption of feed units for 1 ts of milk or 1 ts of gain on the farm amounted to 80% of the average seasonal indicator, livestock breeders are awarded in the amount of 30% of their wage fund received in milk production or the weight gain of livestock during the year;
- with the consumption of feed units from 80.1 to 85.0% - 20% of the fund;
- when spending from 85.1 to 90% - 15% of the fund;
- when spending from 90.1 to 95.0% - 10% of the fund;
- when spending from 95.1 to 100% - 5% of the fund.

To increase labor productivity, improve the organization, rationing and remuneration of labor in the economy, it is necessary:
  1. to develop a draft Regulation on a special assessment of working conditions.
  2. to update the regulatory framework for labor rationing.
  3. to develop a methodology for calculating the optimal number of teams.
  4. to develop a methodology for the distribution of collective incentives based on the results of the team’s work in order to fully consider the individual contribution of each employee to the overall result of the team. It is proposed to apply the labor participation coefficient, which will be adjusted with the help of increasing and decreasing coefficients and the coefficient of the qualification level.
  5. to introduce a one-time bonus for innovation as a percentage of the amount of the annual economic effect.
  6. to review the current system of sanctions.
In order to improve the production and financial capabilities of LLC "Galkinskoe", the implementation of the following measures is necessary:

- constant comparison of budgets with actual data, analysis of deviations, strengthening of favorable and reduction of unfavorable trends, improvement of planning methodology;
- periodic comprehensive diagnostics of the existing investment management system and investment directions;
- introduction of advanced methods and technologies of production with improvement of its quality, ensuring reliable trouble-free operation of technological equipment;
- improvement of product quality by improving the utilization of existing capacities, restoration, reconstruction and modernization of a number of production facilities, introduction of new technologies;
- modernization of technological equipment, compressors, reduction of hydrocarbon emissions to a possible minimum.

The introduction of controlling at the enterprise consists in establishing a system of operational control over expenses and income on a monthly basis, with quarterly internal reports. Cost control consists in ranking cost elements from the most important to the least important, that is, an analysis of cost items is necessary. The analysis should show at what expense it becomes possible to reduce the cost of finished products.

The implementation of the competitive strategic planning function at the enterprise is possible with the help of basic principles or rules for the formation and implementation of a strategy in the market: continuity and accumulated experience; sequence of stages performed; cyclicity.

The order is determined by the dependence of subsequent periods on the results obtained during the previous stages, which helps you to prevent past mistakes and minimize the discrepancy between the competitive strategy and market conditions in order to competently evaluate the results obtained during the implementation of the strategy. The competitive cycle of strategic planning implies that the outcome of a competitive strategy that adapts to a competitive environment should be considered in the further development strategy. Competitive strategy seems to be an important tool in the hands of a manager, since it is aimed at solving a certain number of problems and tasks that the organization faces.

Firstly, the existing analytical materials are obtained and structured in the process of strategy formation, and also help both managers and performers to understand the situation on the market, considering the positions of the organization on it, the realism of goals and ways to achieve them. Secondly, when the company's management approves competition strategies, organizational and administrative documents come into force that help to focus attention in the right direction. Today, specialists often face a situation where there is a gap between the theoretical competitive strategy and the one applied in practice by the enterprise. To reduce this gap, the following algorithm is proposed for the development and implementation of a competitive strategy of the enterprise.

Revenue control is necessary to determine the sources of additional profit on operations. For example, having invested funds in an investment project now, the company will make a profit in the subsequent period. Revenue control involves studying the market situation, both in Russia and in the world, regarding the prices of finished products and the availability of competitive products.

Management needs to either create a controlling department, or divide the responsibilities of the controlling function between the working employees. If necessary, several employees should be sent for advanced training to obtain basic knowledge and principles of controlling implementation at an industrial enterprise.
In LLC “Galkinskoe”, it is advisable to subordinate the controlling service directly to the general director. The head of the controlling service will receive a fairly high status and independence from the heads of other financial and economic services.

When implementing a controlling system, one of the important components is the establishment of information flows. Management is impossible without the necessary information.

Since in LLC "Galkinskoe" all employees are engaged in separate work, they have their own responsibilities. Therefore, having finalized the information flow system at the enterprise, the responsible employee will be able to receive information independently.

Growth of average annual Labor Productivity due to reduction of working time losses (ΔLP):

- 69.7 thousand rubles – decrease in average annual output of LLC "Galkinskoe" due to reduction of working hours.

Ao = 82.2 + 69.7 -3.0 = 148.9 thousand rubles - the total change in average Annual Output due to the action of three factors, while eliminating intra-shift losses of working time.

Δ LP = 148.9 thousand rubles – 9.5 = 139.4 thousand rubles - increase in average annual output.

139.4 / 897.3 * 100% = 15.6% - increase in average annual output.

Conditional Number Savings due to labor productivity growth (Sn):

\[
Sn = \frac{ΔLP \times Nav}{100 + ΔLP}
\]

where ΔLP - labor productivity growth, %
Nav – the average number of employees, people.

Sn = \frac{15.6 \times 86}{100 + 15.6} = 12 people.

Thus, the average annual output of one employee will increase by 15.6% with the elimination of intra-shift losses of working time in LLC "Galkinskoe".

With the reduction of intra-shift losses of working time, the conditional number savings will amount to 12 people.

We will find an indicator of cost reduction in connection with the savings of the salary:

Salary = 12 * 19923 * 1.3 = 3729.6 thousand rubles

At the same time, time will be spent on holding four meetings of 30 minutes each. Calculate the costs of the event:

\[
C = LP losses \times 0.30 \times 0.5 \times 4 = 0.6 \text{ thousand rubles}
\]

Find the economic efficiency of the event in connection with the savings of the salary:

\[
San = 3729.6 - 0.6 = 3729 \text{ thousand rubles}
\]

The intensification of competition in the market, in particular, leads to the need for companies to create and increase their competitive advantages, which, in turn, means an increase in investment. Investments are made mainly at the expense of borrowed funds.

It is necessary to prepare an information and analytical basis for identifying business growth drivers. To do this, it is proposed to use the following approaches:
1. Analysis of the industry in which the company operates. In this case, it is assumed to identify the specifics of the industry in question, to determine the key factors of the effective activity of enterprises. In particular, earlier we identified those features of the LPC of Russia and the woodworking industry, which, in our opinion, have a significant impact on the value of companies in this industry.

2. Analysis of financial statements, performance indicators of the company and comparison with the "best analogues" in the studied industry (benchmarking). This approach assumes a retrospective analysis of the main indicators of the financial statements (balance sheet, profit and loss statement) of the enterprise for 3 reporting years and a comparison of these indicators in dynamics (change from period to period), including with the indicators of the "reference company". Such indicators are: profit level, profitability level, inventory level, cost, etc.

3. Analysis of the company's activities effectiveness by functional blocks. In this approach, it is necessary to analyze the main functional areas, such as: company strategy, sales, personnel management, financial unit, logistics, cost management, organizational structure, etc. Drivers are activities/factors that significantly affect the change in the value of the company.

The conducted research on the problems of formation and development of the strategic planning and forecasting system has shown its importance for the rural economy in the context of import substitution, to determine priority areas in the context of import substitution and the formation of necessary prerequisites for the diversification of the production sector, assistance in expanding business activities, improving social infrastructure, improving the quality of life for the rural population, conservation and reproduction of natural resources. The current situation requires the improvement of theoretical and methodological approaches to the development and implementation of strategic objectives for the sustainable development of rural areas in regions with an agrarian-oriented economy.

When developing an enterprise development strategy, it is necessary to consider the list of factors that affect the company's activities in the short, medium and long term, as well as considering the creation of additional business value.

References

2. O.A. Nezamova, A.A. Stupina, O.A. Shagaeva, IOP Conf. Ser.: Earth and Env. Sci. 1076(1), 012053 (2022)