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Improvement of Information Provision of Small Business in the Agricultural Sphere

Abstract

International experience shows that one of the important attributes of small business in the agricultural field is the priority of the development of innovative technologies. The sustainable development of the agrarian economy depends crucially on the level of resource provision, including information provision. One of the characteristic aspects of economic relations of business structures operating in agriculture is the risk factor accompanying agribusiness. As it is known, the agrarian entrepreneur bears full responsibility for the results of economic activity even in the conditions of advanced state patronage. It faces uncertainty in the operating environment, ambiguous situations in cost and output indicators.

The problem of assessing the risk and determining its effect on the economic and economic results of the business entity in terms of quantity and quality arises. Practice shows that risk is more likely when entrepreneurial activity meets mutually exclusive situations. The point is that if the probability of achieving the desired economic result of agricultural activity is not known, then the corresponding situation should be considered as uncertainty. It is obvious that in this case it is not a matter of determining the risk, but of evaluating the information characterizing the risk.

In economic practice, risk occurs when desire and reality, goals and results do not coincide in conditions of purposeful, deliberate activity. An entrepreneur trying to minimize risk and uncertainty improves information relations and the necessary information base. In some cases, a business entity takes a risk knowingly in order to gain additional profit. Venture entrepreneurship is a classic example of this. The efficiency of business activity depends to a decisive degree on the quality of the analysis carried out to assess the nature and level of activity in the field and in the relevant segment of the market, and the degree of self-justification of the perspective parameters of development.

Keywords: *risk, business, efficiency, entrepreneur, forecast, finance*

Introduction

The effectiveness of the use of information resources is directly conditioned by the normative-legal and socio-economic environment created in the country. In this regard, the regulation of economic and social problems involves the processing of a large amount of information arrays. In addition to reflecting a number of properties of economic information, resource use information also has the following unique features (Churkina & Sukhova, 2016):

- the information reflecting the state and use of resources is cumulative in any case, i.e. forms arrays that express the occurring processes in aggregate;
- the cumulative nature of this information is also embodied in the fact that other resources, especially financial resources, are a condition and result of economic activity, etc.

Research

The frequency of using a number of resources in agriculture is somewhat lower than in other areas. At the same time, in agriculture, where the processes related to natural and climatic

conditions play an important role, the probability of resource use harmony is higher than in industry and service sectors (Amrahov et al., 2023). The listed factors, including the seasonality of production, increase the stochasticity of resource use parameters.

Therefore, it is appropriate to apply economic-mathematical methods in solving the issues of increasing the efficiency of resource use in agriculture. The probabilistic nature of agricultural development parameters requires the use of stochastic programming. Thus, stochastic programming is a convenient economic-mathematical tool used for solving problems with probabilistic conditions and based on an incomplete information base (Mirzazade, 2023).

If the statistical and other economic-mathematical model occupies the central place in the preparation and evaluation of any decision of the entrepreneur, then the requirements imposed on that model are formed under the influence of the real economic system and concrete economic situation (Amrahov et al., 2023).

The structure of the economic-mathematical model applied for the analysis and forecasting of business activity in the agricultural field depends on the following factors (Pinkovetskaya, 2015):

- the nature of the modeled object;
- the economic nature of the modeled process and the level of management;
- the purpose of the research;
- degree of justification of information provision, etc.

The uniqueness and complexity of agriculture makes it difficult to cover business activity and development trends in this field in one model. Therefore, it is necessary to build a system of economic-mathematical models and, of course, the models included in this system should be interconnected in logical and informational aspects. In the analysis and forecasting process of those models, the results should be evaluated in terms of a single goal.

Despite the development and testing of numerous models of the development, specialization and placement of agricultural production, their transformation into a working tool has not happened. As a reason for this, in addition to the contradiction between the theoretical-methodological and practical aspects of the models, it is also necessary to mention the difficulties in providing information. Operational management, regulation and control require uniform information provision as components of resource management stages and interrelated activities. Although the technical and mathematical software of information processing technologies at those stages are noticeably different, the general systematic approach and its priorities should be in focus.

In the agricultural field, the business entity accepts efficiency as the main criterion in the use of resources. Actions are taken to increase efficiency both directly and indirectly during the performance of this criterion. Of course, the perfect and sufficiently detailed information provision of the state patronage of the business entity gives a greater effect in case of the realization of new technological requirements. There is a need to increase the frequency of information processing and expand the subject area in order to cover all the main characteristics of the business environment in the agricultural field (Amrahov et al., 2021).

At the moment, the obstacles of an institutional nature that are encountered in connection with the application of new technologies in the information provision of the use of resources attract special attention. Institutional barriers in the agricultural field are still one of the main factors that narrow the scope of application of information technologies. The point is that in an environment conditioned by instructions, directives and other restrictive information, some intermediaries may not be sufficiently interested in realizing the possibilities of adequate response to environmental influences. There is another reason. During the formation of methodological support, some information flows are regulated by the performance criteria of management functions. Studies show that prioritizing management interests should be considered one of the main factors determining such a situation. We regret to note that such a situation is an attempt to subordinate the functional structure of information to its organizational structure. However, it is positive that they have been minimized thanks to structural reforms.

It is known that collective efforts involve the concentration of both intellectual and other resources. Property pluralism, which activates internal potential in regulated market conditions, has

a leading role in the formation of the economic base of entrepreneurship, which is an important factor of progress. It is no secret that the business entity has the potential to solve many problems at the regional and national level by shaping the business environment in the agricultural sector.

There is no unambiguously justified approach to the construction of information arrays that characterize these possibilities quantitatively and qualitatively. At the same time, there is no doubt that forecasting methods should be used to assess development potential. Even in solving similar issues, the differences in information provision do not allow for a unified approach. Therefore, in order to evaluate the prospective opportunities of agrarian business subjects in increasing the efficiency of resource use, first of all, the indicators characterizing the business environment should be determined, and the ones that provide acceptable information should be selected from them. Then, the representativeness of the quantitative characteristics of the mentioned indicators should be evaluated. In the next stages:

- the possibilities of application of forecasting methods proven in practice in the database of indicators according to the listed criteria should be investigated;
- intermediate and final results of forecasting calculations should be evaluated by an expert.

The solution of socio-economic and other problems is related to the information level of the society. Thus, the business entity has to solve economic and legal issues at every step, and the information provision of these issues finds its expression in the traditional document circulation. In practice, the changes in the content and form of documents, classifiers do not always correspond to the modern requirements of updating information.

As in other fields, the following basic principles should guide the activities of information service institutions in agriculture:

- multispectral and multiple use of necessary documents in all possible modes;
- unity of centralized and decentralized processing of information resources;
- consideration of end user requirements;
- adequacy of information to reality and unity of ease of use;
- ensuring organizational, technical and program cooperation at different levels.

Processing of documents related to agricultural activity, their repeated use in all regimes faces both methodological and informational difficulties. Thus, document circulation subject to a single methodology is possible in a small number of segments of accounting and economic analysis in agriculture. In other segments, the provision of multi-faceted processing of documents is problematic. The point is that the system of indicators characterizing any activity in the agrarian division forms sharply different groups according to the levels of aggregation and disaggregation, the degree of generalization.

Every move toward centralization in the management of information flows reflecting the use of resources is accompanied by positive and negative consequences in agriculture, as in other fields. The strengthening of centralization in the management of information resources reduces the flexibility and adaptability of the information system. However, the number of errors is reduced. Studies show that the advantages of centralization in the management of agrarian information resources have a negative impact on intra-system dynamism. As a result, except for financial information, the response of other information flows to innovations may be weakened.

The centralized processing of resource use information in agriculture does not fully correspond to the market concept. It should also be noted that the country's food security information provision is an exception in this regard. Summarizing what has been mentioned, it can be concluded that the state of resources in the field and the degree of centralization of the processing of information about their use cannot be determined only by the internal requirements of the information system. In other words, centralization can be accepted as an object of monitoring only to the extent that it is proven satisfactory.

The experience of solving agricultural information problems shows that the unity of centralized and decentralized approaches in information processing is effective. This approach, which is considered acceptable for the transition period, is considered as the conclusion of both theoretical-

methodological generalizations and empirical methodological studies (Velichko, Lavrova & Kravchenko, 2016).

Attempts to solve the information problems of resource use with the application of artificial intelligence systems deserve attention, and the agricultural sector is no exception in this respect. First of all, this is related to the need to expand the possibility of turning any useful information into numbers in farming practice. The researches show that the quantitative evaluation of informal experience, which plays a special role in production and commercial activity in agriculture, on a pragmatic level, requires the conversion of information into numbers under the conditions of application of artificial intelligence systems (Guseva & Kudryashova, 2013). The fuzziness of logical connections between primary, derived and final information creates conditions for the application of artificial intelligence elements here.

Conclusion

The specific aspects of information in agriculture are conditioned by the following features of the field:

- imposing strict regulations on the duration of the movement of the product towards the final consumer. In this case, the producer of perishable and non-transportable products can get additional income by having a flexible system of agro-economic information. The fact is that the delays in the circulation of documents cause serious damage to agrarian entrepreneurship and sharply reduce competitiveness compared to imported products;
- there is strong competition between producers in the agricultural sector. Entrepreneurs entering the market with the same products have a great need for complete information on fodder, fertilizer, seeds, machinery and other market segments in the conditions of strong internal competition;
- agriculture is the least maneuverable area of the national economy. Here, the specific weight of costs in the stages of storage, transportation, and sale is higher than in other areas. For this reason, the detailing of information about the structure of costs is its necessary quality indicator;
- the information arrays reflecting the price disparity of the ratios in favor of the latter in the dynamics of prices of agricultural and industrial products should be regularly updated. A system of comparable indicators of price parity in institutions that must provide information services to the agricultural sector should be calculated based on a single methodology;
- in the conditions of globalization, the information provision of the financial status of the export-oriented activity of the agrarian business entity should allow monitoring the changes in the national and international context;
- an information base should be formed that allows to quantitatively assess the influence of the factors determining the efficiency of foreign trade activity;
- information on market regulation is mainly presented in terms of value. Therefore, the appropriate status of financial information flows should be ensured, their level of detail should be high.

Agricultural product participants need consulting services. This need is high and multifaceted. Sharp difference in production and labor periods in agriculture, risk factor, strong intra-field competition, etc. such aspects increase the demand for information-consulting services of the agrarian entrepreneur.

The following can be attributed to the problems faced by business entities in the agricultural field in the organization of information-advisory services:

- lack of experienced specialists;
- incompleteness of the information base;
- there are gaps in the mechanism of economic-legal regulation of relations between the consultant and the entrepreneur;
- in many cases, the difficulty of revealing correlations between initial, intermediate and final indicators, etc.

Among the factors that make it necessary to expand the possibilities of the information-consultation service in solving the mentioned problems, the following have an important role:

- increase in the number of horizontal economic relations in the field;
- justification of the economic feasibility of the formation of the consulting infrastructure;
- the need to increase the potential of agricultural science and education;
- stricter requirements for coordinated cross-sectoral management;
- creation of a multi-variant situation on financial sources and financial mediation;
- acceleration of integration and innovation processes;
- the need to use modern information and telecommunication means independent of distance, etc.

The imperative of financial relations is evident in the agricultural sector. Thus, the low rate of working capital in agricultural production increases the need for financial resources. Ensuring the profitable operation of farms and the normal movement of financial resources necessary for the expansion of this activity depends to a decisive extent on the efficiency of the management of information flows. Thus, in the last five years, the characteristics of the financial flows directed to the agricultural sector have become more complex. Banks' interest in the agricultural sector takes various forms, from microcrediting to structural renewal and investment. One of the primary functions of the banks that participate as trustees in the placement of foreign capital in the country's agrarian regions is the selection of events and measures that maximally support economic activity.

The efficiency of business activity in the agricultural field depends on the quality of economic education and the relevant information base. From this point of view, numerous information flows necessary for the activity of agrarian organizations should be regulated, and information-consultation and information-reference services should be organized at the level of new requirements.

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