

Development of Regional Information and Consulting Systems for the Agro-Industrial Complex

A. Apazhev, M. Marzhokhova, L. Khalishkhova
 Federal State Budgetary Educational Institution of Higher Education
 «Kabardino-Balkarian State Agricultural University named after V.M. Kokov»,
 Russia
 l_a_u_r_a@inbox.ru

Abstract— Successful implementation of economic reforms necessitates the generalization and systematization of scientific knowledge and information in the course of the formation and development of information communication mechanisms. Projects related to information and consulting support acquire the status of tools for modernizing the communication policy of the development of the agro-industrial complex at the regional level. Geographical and sectoral disunity of the subjects of the agro-food market places special importance on the informational and consultative aspects of regional policy. Forming the architecture of the regional links in the information and consulting support of the agro-industrial complex will make it possible to build a modern organizational and technological platform for the implementation of regional policy, to transform the communication field, thus increasing the efficiency of the functioning of the entire agro-industrial complex. In this connection, the article summarizes the theoretical and practical aspects of improving information and consulting support at the regional level; the notion of "regional information and consultation system"; Identify the imperative factors that cause the need for the formation and development of regional information and advisory services; the essential characteristics of the object under investigation are revealed.

Keywords— regional system, information and consulting support, modernization, agro-industrial complex, agricultural consulting, competitiveness.

I. INTRODUCTION

The effectiveness of the functioning and competitiveness of the agro-industrial complex depends crucially on the use of the achievements of scientific and technical progress, the relevance, completeness and reliability of the information used, the depth and quality of its analysis. Information and consulting activities involve the transfer of information about scientific achievements to potential consumers. Today, there is a need to inform agricultural commodity producers on the following types of scientific and technological achievements:

- scientific and technical products recommended for development in production (new varieties of crops and animal breeds, modern high-performance machines and equipment, advanced technologies, protection of agricultural plants and animals, fertilizers, early farming methods, effective methods of behavior for agrarian markets and markets for material and technical resources);

- Russian advanced production experience;
- rationalization proposals; - inventions;
- foreign production experience in the development of innovative technologies in agriculture.

Relevance. The need to achieve positive dynamics in the development of the agrarian sector of the national economy is actualized by the creation of information and consultation systems based on scientific modeling, searching for optimal options and forecasting possible consequences. The development of a system of information and consulting support for agricultural producers in Russia is taking place at a slow pace, due to a number of complex problems related to the lack of state support, a weak material and technical base, a shortage of highly qualified personnel, and a lack of a unified development strategy. In addition, the model of management of regional information and consulting support systems is needed, there are no programs for their development, the scientific and intellectual potential of research institutes and agrarian universities is poorly used. In this regard, the study of theoretical aspects, the analysis of the objective conditions of formation and functioning, the development of methodological provisions and practical recommendations for improving the management system of regional information and consulting support for the agro-industrial complex is important and relevant.

Scientific significance (with a brief review of the literature). The development of theoretical-and-methodological provisions and practical recommendations on the formation and functioning of information and consulting support systems in conditions of innovative development of agriculture is an important scientific and practical task, the solution of which pre-determines the effective spread of innovations in agriculture and, as a result, sustainable economic growth in the country. Many works of both Russian and foreign scientists are devoted to the development of agricultural counseling. A prominent scientific and practical contribution (from 1916 to 1924) in the development of agricultural counseling (at that time of public agronomy) was made by the distinguished Russian scientist AV Chayanov [23]. Issues of constructing a consultative system and innovative development of the agro-industrial complex are devoted to the works of P.A. Andreeva [1], V.M. Ba-utin [3], M.Ya. Veselovsky [5], V.V. Kozlova [13], L.S. Kolo-

tova [14], V.V. Lazowski [16], V.G. Savenko [20], I.S. Sandu [21], B.I. Shaitan [22].

Among the foreign scientists, there are works on the theory and methodology of agricultural counseling by Van Den Bana [30], J. Kranz [15], F. Hoffman [29], Jozsef Kozari [11], S. Amere [24], C Bennett [25], Yu. Kristensen [26], D. Pedersen, B. Jacobsen [27], L. Greiner [28].

Regional aspects of the development of advisory activity are touched in the works of Ashkhotov, OI. Bagova [2], V.M. Boltovskogo [3], A.P. Zhivaeva [7], O.V. Kireeva [9], OV Igoshkin [8], A.S. Kirilenko [10], A.M. Kozina [12], M.A. Marzhokhova [17], S.N. Mikhalev [18], Khalishkhova [17], A.V. Olontseva [19], L.B. Vinichek [6].

Formulation of the problem. The development of theoretical provisions and practical recommendations for the improvement of the regional information and consulting system for the agro-industrial complex is a demanded field of scientific knowledge and contributes to increasing the competitiveness of Russian agricultural producers.

The need to improve the management of the agro-industrial complex at the regional level and adapt to the problems of the modern agrarian economy requires:

- development of modern methods of making managerial decisions and tools for their implementation;
- development of conceptual, methodological and practical recommendations for the development of the information and consulting system of the regional agro-industrial complex;
- description of the structural elements of the information and consulting system of the agro-industrial complex at the regional level; justification of an effective tool for preparing management decisions;
- development of methods and forms of consulting on topical issues and issues;
- substantiation of the possibilities of forming a single information space of the regional agro-industrial complex; identify the main areas of modernization of the information support system of the regional agro-industrial complex.

Theoretical part. The Regional Information and Consulting System (ICS) is a mechanism for the dynamic interaction of science, education and the agro-industrial sphere in order to bring information to economic entities and management bodies for practical application.

The purpose of regional information and consulting systems is to provide users with scientific, technological and market information, advanced domestic and foreign production experience.

The main tasks of the ICS are the definition of the strategy and tactics of innovative development of the regional agro-industrial complex, monitoring the implementation of the innovation strategy.

Intellectual capital of ICS is based on the knowledge of specialist consultants from among scientists, practitioners, the management corps, who own modern methods of management, skills in the preparation of managerial decisions. Users of information and consulting services are agricultural and

agro-industrial organizations, peasant (farm) farms, public administration authority, the population.

The main areas of development of ICS are: informational, consultative, innovative, educational, exhibition, publishing, as well as participation in the development and implementation of regional agro-food policies.

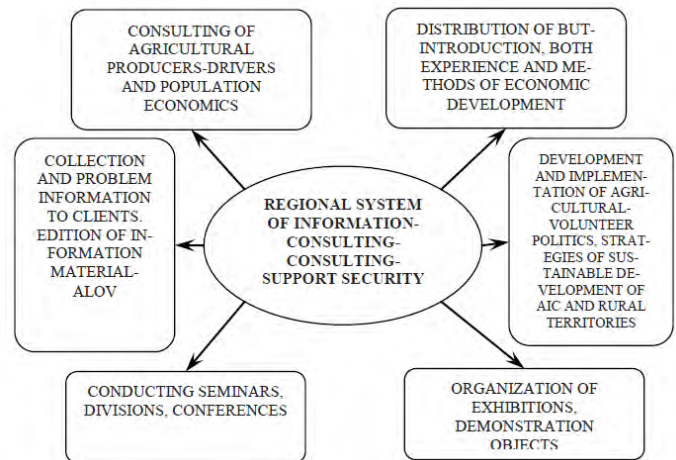


Fig. 1. The main directions of the development of the regional system of information and consulting support

The organization of information and consulting support of agricultural producers in the agro-industrial sphere should be carried out in a number of areas, including:

1. Development of scientific and technical and technological solutions for the organization of agricultural production in various natural and climatic conditions.
2. Development of a set of scientific and technical solutions that ensure the organization of agricultural production on the basis of highly effective biotechnological methods.
3. Development and implementation of highly productive and environmentally friendly agro-technologies for the production of crop and livestock products, providing scientific and technical modernization of the agro-industrial complex and sustainability of the growth of rural areas.
4. Development of recommendations on the introduction of new varieties of agricultural crops for cultivation in the subjects of the Russian Federation.
5. Assessment of selection and genetic parameters of the population of pedigree milk-beast livestock in agricultural organizations.

Functions of regional systems of information and consulting support of the agro-industrial complex:

1. Establishment of close contacts with the subjects of agrarian and other rural business in order to identify existing and emerging problems in them, determine the needs for information counseling services on the basis of their generalization.
2. Creation of an information client base, collection and processing of information on foreign progressive forms and methods of management, advanced technologies of production, processing, storage and sale of agricultural products, oth-

er activities in rural areas for the purpose of their appropriate use to solve problems of Russian rural development.

3. Bringing scientific, technical, economic, legal and other information to stakeholders in the agro-industrial sector. 4. Assistance to agricultural producers in mastering innovative developments, best practices and methods of effective activity in a market economy.

5. Advising all interested persons on issues within the competence of information and consulting services, in direct communication with these persons, by preparing and submitting materials to them, learning new techniques and methods of carrying out their activities.

6. Development of consulting, investment, innovation and other projects and support for the implementation of these projects. 7. Participation together with the management bodies of the agro-industrial complex in the implementation of the state agrarian policy. 8. Participation in the restructuring and restoration of the economy of insolvent farms.

9. Preparation of proposals for the development of innovative projects and implementation of applied research and development.

10. Development and implementation of measures for sustainable development of rural areas and alternative employment of rural population.

11. Provision of legal services to protect the rights and legitimate interests of agricultural producers and residents of rural settlements.

Practical significance. The development of methodical and instrumental information-consulting support of the regional agro-industrial complex will allow: to activate the innovative sphere of activity of agricultural enterprises; increase the output of competitive and high-tech products in the total volume of agricultural production; increase the investment attractiveness of the country's agriculture. The totality of the formulated theoretical propositions, methodological approaches and practical recommendations will create the basis for solving the problems outlined in this paper.

II. RECOMMENDATIONS

To organize it is necessary to implement the following measures information and consulting support of the agro-industrial complex with the purpose of increasing the efficiency of innovation and investment activity:

1. Enhancement of activities to collect information, approbation of new technologies and assistance to agricultural producers in the development of promising innovative developments recommended by leading agricultural scientists.

2. Formation of a common information space and banks of innovation technologies with the help of leading research and educational organizations for the purpose of modernizing the industry.

3. Selection and documentation of basic farms and regional agro-industrial enterprises for the organization of demonstration production, sites, fields and farms for popularization and introduction of innovative technologies. Formulation of con-

tracts with agricultural organizations to assist commodity producers in the region when implementing innovative technologies and investment projects and replicating advanced production experience.

4. Rendering assistance to agricultural producers in the process of assessing the expected effect of the proposed innovative technologies.

5. Dissemination of best practices through exhibitions, field days, retreats, master classes, trainings, open public lectures.

6. Preparation of technical solutions and proposals, based on monitoring the needs of agricultural producers; carrying out of applied scientific researches necessary for conducting effective agricultural production by agrarian universities and research organizations.

7. Strengthening the influence of information and consulting systems on the promotion and implementation of innovative projects in various sectors of agriculture with the involvement of leading scientists and specialists.

8. Creation of web portals or web pages by all subjects of information and consulting systems in order to organize effective information exchange between rural producers within a single information space, organize the centralized development and dissemination of popular software products, update databases, satisfying customer requests in real time on the entire range of updated information.

III. CONCLUSIONS

1. The complex dynamic organization of a purposefully functioning system of information and consulting support of the agro-industrial complex requires the application of new approaches, the creation and improvement of the organizational and economic mechanism, without which the system can not be sustainable.

2. The system of information and consulting support should be integrated into the agro-industrial sphere through the organization of its interaction with other social institutions. 3. Developing regional information and consulting support systems, it is necessary to take into account the specific conditions of specific regions, including organizational, economic, financial, productive capacities, social parameters of labor resources, and the level of personnel qualification.

4. The transition to an intensive path of development of the agro-industrial complex on the basis of scientific and technological modernization is possible only with the development of an innovative infrastructure, including a diversified system of information and consulting support for the transfer of innovations to all spheres of the agro-industrial complex.

5. The development of modern regional information and consulting systems for the agro-industrial complex is characterized by: insufficient regional development, which limits the availability of advisory services to the rural population; the unsatisfactory state of the material and technical base of the consultative organizations; low level of introduction of innovative technologies associated with the complexity of promot-

ing innovation and inadequate cooperation of subjects of the designated system with educational research institutions; low effective demand for consulting services in agriculture.

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