The level approach to AIC management

M Nagibina¹, O Pirogova*¹ and A Kormilitsina¹

¹ Russian State Agricultural University, 50 Entuziastov highway, Balashikha 143907 Russia

E-mail: opirgva@yandex.ru

Abstract. The need to determine the degree and nature of government intervention in the activities of agricultural organizations, the organization of production management in general, and certain types of products determine the relevance of research topics. Using a level approach to the concept of “board”, the main features of the organization, industry, territory, and state management are highlighted.

1. Introduction

The diversity of approaches distinguishes research management processes in agriculture and, if taken more widely, in the agro-industrial complex, domestic and foreign scientists.

Management in the agro-industrial complex was considered: at different stages of development (the Soviet period; the period of post-Soviet transformations), at various levels of management (state and economic), at the level of management of the main sectors (plant growing, animal husbandry) and sub-sectors (by type of products), for individual functions of management and management activities in general, in various areas of management (anti-crisis, design, electronic, management of reproduction, risk, innovation, quality, etc.).

The existing control system of the agro-industrial complex includes federal, regional, and district links that perform the functions of economic and state management.

Economic management is implemented at the organization level. Any organization acting as a legal entity is characterized by a people management system to achieve its goals and objectives. The formation and development in the AIC of the state, collective, private-entrepreneurial, individual, and non-profit sectors represented by various types of organizations and enterprises with their own characteristics and management mechanisms led to the separation of management approaches — management of the public sector, unitary, and state-owned enterprises; organization management is for non-state, private, commercial sectors in the agro-industrial complex.

Nevertheless, many domestic researchers mix these approaches, calling everything “management” in the agro-industrial complex. In modern economic conditions, public administration is reduced to the creation of conditions for the effective functioning of enterprises and organizations of the agro-industrial complex, depending on the tasks relevant to the industry at this stage of development, and control of their activities. With regard to commercial organizations should be considered government regulation of their activities.

2. Research Methods
In the study of the nature of management processes in the agro-industrial complex, we applied a level approach, used a set of methods and techniques of monographic, abstract-logical, system analysis and comparisons.

3. Results and Discussions
With reference to the object of research in a broad sense, management means managing the industry of agriculture as an activity (or agricultural producers, villagers). However, stating the definition of management as a guide by something or someone is not enough.

Expanding the functional purpose and content of this guide, we highlight the following positions, emphasizing the diversity of approaches and definitions.

1. Management is a function of organized systems of various nature (biological, technical, social), ensuring their integrity, i.e. the achievement of their tasks, the preservation of their structure, the maintenance of the proper mode of activity.
2. Management serves the interests of the interaction between the components of a particular system of elements and representing a single whole with tasks common to all elements.
3. Management is the internal quality of an integral system, the main elements of which are the subject (controlling element) and the object (controlled element), constantly interacting on the basis of self-organization (self-management).
4. Management involves not only the internal interaction of the elements constituting the system. There are many interacting holistic systems of different hierarchical levels, which implies the implementation of management functions of both intrasystem and intersystem nature. In the latter case, the higher order system acts as the subject of control with respect to the lower order system, which is the object of control within the framework of the interaction between them.
5. Management is a purposeful ordering effect implemented in the relations between the subject and the object and carried out directly by the subject of management.
6. Management is real when subjecting an object to a control subject, a managed element of the system to its controlling element.
7. Management has a functional structure.

On the example of dairy cattle breeding, we have drawn up a diagram of the main directions for increasing its efficiency (Figure 1). The presented areas are divided into three groups, implemented at the enterprise level: production management, improvement of the elements of the organizational and economic mechanism (at the industry level), mainly at the industry regulation level (at the state level).

Systematization of the main directions of state and economic management in the agro-industrial complex is presented in Table 1.
Improving the efficiency of dairy cattle breeding.

Figure 1. Directions for improving the efficiency of dairy cattle breeding.
Table 1. The main directions of management in agro-industrial complex.

| Economic management of organizations (enterprises) in the agro-industrial complex, their associations (unions, associations, integrated formations, clusters) | - Organization functioning (management system, strategy, technology, structure, personnel);
- Property management (ownership, operational management);
- Corporate governance;
- Management activities (management, events, styles, methods, management tools, managerial work);
- Team management (group, team, work collective, leadership);
| State administration of the agro-industrial complex (general, functional, industry) | - Management of state property (state, unitary and state-owned enterprises; privatization);
- Government regulation of markets (labor, land, capital, agricultural products and food);
- Government regulation of organizations in the agro-industrial sector (lending, financing, subsidizing, insurance, taxation, pricing, stimulation of activities, investment, informational support and provision of advisory assistance, interventions);
- State management of projects and development programs (for industry, region, rural area);
| Public administration | - Informal methods (through electronic media, printing, methods of education and persuasion);
- Management of public associations and other non-governmental organizations, political parties, trade unions, citizens;
- Stimulation of self-government, participation of rural residents in the management of public and non-profit organizations. |

The state, by virtue of its specific functions, acts both as an object and as a subject of management in state regulation of the economy.

In economic management, an intermediate stage of sectoral management was singled out, which is the management of unions and associations for representing and protecting common interests, achieving socially useful goals, coordinating business activities, uniting citizens of one professional sphere.

Economic and informational globalization, the development of the digital economy has led to the creation of e-government, with the transformation of the functions of power, its relations with citizens and organizations, the organizational structure of the execution of powers in accordance with the expectations and priorities of citizens, including rural and organizations.

Government leadership and management is inherent in certain industries (management of foreign affairs, internal affairs, defense). The mechanism of state regulation is inherent in other industries, including agriculture, aimed at creating economic, organizational and legal conditions for the functioning of organizations. The transition from a policy economy to a market economy has led to a transition from direct management of agricultural production to the creation of favorable conditions for its operation.

We consider the state regulation of agriculture as the organizational, economic, and legal impact of the state on the formation and functioning of forms of budget support for agricultural producers aimed at implementing the basic system functions, ensuring the sustainability of the industry, encouraging the development of agriculture.
Table 2. Functions of government in agriculture.

| Common to the agricultural sector the functions of public administration | Industry-specific government functions |
|---|---|
| – Management information support; | – Regulation of the food market; |
| – Modeling and forecasting; | – Stimulation of the accelerated development of an innovative economy and an increase in the research intensity of the agricultural sector; |
| – Planning; | – Provision of sanitary, phytosanitary, and veterinary (veterinary and sanitary) measures; |
| – Organization; | – Protection of the rights of citizens to good nutrition (elimination of the country's food dependence on foreign countries and the reduction of food imports); |
| – Management; | – Establishment of a social order, creation of a fair policy of food supply of the population, including those with fixed state incomes, pensioners and children dependent on state social security. |
| – Leadership; | – Achieving the caloric level of the daily diet of the population in accordance with physiological norms with the existing structure of consumption, price system, income level, social benefits and benefits, the formation of a system of food assistance to people who do not have enough income to buy food; |
| – Coordination; | – Ensuring the quality of life of the rural population, increasing the growth of incomes of people employed in agriculture, creating the material basis for sustainable development of rural territories and decent living conditions of the rural population; |
| – Control and accounting; | – Regulation of the food market; |
| – Regulation. | – Stimulation of the accelerated development of an innovative economy and an increase in the research intensity of the agricultural sector; |

In the development of rural areas, there are three main directions of development [4]: (a) sectoral (modernization of agriculture and agri-food complex); (b) redistributive (reducing the gap between the most backward rural areas and other sectors of the economy); (c) territorial (by the development of rural areas in general, using the capacity of the territory in attracting all available resources and integration at the local level, including diversification of the rural economy).

The desire to integrate not only within the industry and on a national scale (the creation of the EAEU, the SCO, participation in the BRICS) also contributes to the management of the industry. The common agrarian policy determines the target orientation, the coordinated mechanism for the development of the market for each type of agricultural products for the effective use of the resources of each country, optimization of production volumes, meeting general domestic needs for it and increasing export potential [7, 8, 9].

4. Conclusions
Improving the management system of the agro-industrial complex is possible with the increased impact of economic mechanisms at all levels, providing control capabilities and timely management decisions aimed at eliminating negative factors of production. The process of continuous improvement of management is the key to improving the overall efficiency of the industry and its business entities.

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