Economic Mechanism of Agro-Industrial Complex Sustainable Development

Pugach Svetlana
Associate Professor
Kursk State University
Russia
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Abstract

The research is aimed to specify the definition of the “economic mechanism of agro-industrial complex sustainable development” notion. The result of the research is not only the specification of this notion definition, but also the determination of the subjects (participants) of this mechanism, both with factors and conditions, which directly influence on its operation. Thereupon the recommendations of effective and stable development of agriculture and process industries were developed.

Keywords: Agriculture, Agro-industrial complex, Economic interests, Economic mechanism of agro-industrial complex sustainable development Mechanism.
Notion Definition Approaches

At the present time there is no consensus about the content of “commercial mechanism” and “economic mechanism” definitions. Some of the authors consider them identical, the others are fair to note and prove the necessity of their discrimination. Before we consider the differences of such categories in more details, it is necessary to examine the “mechanism” definition itself. The interpretation of this notion from different vocabularies is given at the Table 1.

Table 1. The Content of “Mechanism” Notion at the Different Vocabularies and Encyclopedia

<table>
<thead>
<tr>
<th>Source title</th>
<th>Notion content</th>
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<tbody>
<tr>
<td>Explanatory dictionary of the Russian language</td>
<td>1. Interior arrangement of vehicle or device, which make it works (tech.). 2. figur. Interior arrangement, functioning system of anything, a device for some activity (bookish.)¹.</td>
</tr>
<tr>
<td>Dictionary of foreign words, incorporated in the Russian language</td>
<td>At the common meaning – the way, which modify force into action; also – the combination of all means, which are necessary for actuation one or other acts of our activity (conversation mechanism, motion mechanism, mechanism of government, etc.). In the narrow sense the mechanism is known as the aggregate of separate parts of a vehicle, also – its organization².</td>
</tr>
<tr>
<td>Philosophic encyclopaedic dictionary</td>
<td>System of motions and events, also the device or gadget, in which and by which these motions, determined by nature laws, are done. The mechanism also means the cause-and-mechanistic world view, as contrasted to teleological and vitalistic one³.</td>
</tr>
<tr>
<td>Great Soviet Encyclopedia</td>
<td>System of the objects, intended to transform the motion of one or some objects into required motions of other objects ⁴.</td>
</tr>
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</table>

Thus, from the above given determination we can make a conclusion that in general “mechanism” (from Greek “mechane” - vehicle) was associated with engineering and determined the way, when different vehicle parts were put in motion. The interpretation of this term in different from technical meaning sense results in the functioning of some process, and such functioning is determined by system composition, by the ways and methods of cooperation of its parts and elements.

The extensive research of the mechanisms in economics started in the 60th of XX century. L. Hurwicz defined the mechanism “as cooperation between subjects and center, which consists of 3 stages: each subject

privately send to center mi message; when all messages are received, center calculates the proposed outcome: \( Y = f (m_1, \ldots, m_n) \); center declares the \( Y \) result and puts it into practice, if necessary.\(^5\) In that way L. Hurwicz determines mechanism as the process of cooperation between its constituent elements. Further researches within the framework of economic mechanisms theory were made by R. Myerson and E. Maskin.

A. Culmann writes “we speak about the economic mechanism in case some preceding economic phenomenon implies many others, with no additional impulse needed for their creation. They follow one to another in a specific sequence and bring on some evident results.”\(^6\) Also Culmann marks out the mechanisms of open type, which includes exchange, financial mechanisms, mechanism of balance between production and consumption, and, with some reservations, - inflation mechanism; and the mechanisms of close (self-contained) type, which include measurable and immeasurable mechanisms. At the same time the mechanisms of first type trigger a new, different from the preceding event, while the second type mechanisms – only to its reprocessing in some or other volumes. The merit of Culmann is not only in the definition of economic mechanism as the process with some result, but also in definition of different types and orders of economic mechanisms depending on the condition in which they occur.

L.I. Abalkin gives the definition of commercial mechanism as the way of social production organization with peculiar to it forms and methods, economic motivation and law principles\(^7\). Thereat in further researches he notes, that commercial mechanism “mediate the connection of proprietary forms and productive forces”\(^8\), and warns against attempts to connect proprietary forms and productive forces effective development directly.

Research of commercial mechanism was continued in Y. Osipov’s works, who determines it as society’s system of “business units with common economic management mechanisms and common to the whole system social commercial institutions, which regulate the activity of business units.”\(^9\).

I.S. Averina considers the commercial mechanism as a “system of subject-object relations, which provides the transformation of business activities through changes of “game” rules and conditions by means of forms, methods and goal achievement tools improvement.”\(^10\).

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\(^8\) Abalkin, L.I. 2000. Property, commercial mechanism, productive forces. Economics of modern Russia. Iss.1(5), pp. 53.


In that way, at determining the “mechanism” definition in economics, it is considered either a process with common forms, methods and institutions as process subjects, or as a system of connected elements or games. The theory of economic mechanisms allows us to describe the logic of processes behavior in economics and approach the essence of accrued events.

At the current time, there is no single and clear differentiation of notions “commercial mechanism”, “organizational-economic mechanism” and “economic mechanism”, which leads to confusion in definition of its components. Here we consider the most of widely used approaches. Most of the researches, such as Averina I.S., Bikovskaya N.V., Lebedeva N.N. and others, think that it is necessary to separate the notions of commercial and economic mechanisms, because the second is a part of the first. The minority of scientists identify these notions.

The analysis of literature sources shows that the first approach is more preferable, because the economic mechanism is the basis, which forms the commercial mechanism, together with managerial, political, cultural and other mechanisms.

Here we consider the main approaches to the definition of “economic mechanism” and “organizational-economic mechanism” notion (Table 2).

Table 2. Approaches of Different Scientists to the Definition of “Economic Mechanism” and “Organizational-Economic Mechanism” Notion

<table>
<thead>
<tr>
<th>Author</th>
<th>Notion content</th>
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<tbody>
<tr>
<td>A.I. Altuchov, V.I. Kundius</td>
<td>Economic mechanism of agro-industrial complex development – assembly of organizational frameworks, complex of concrete forms and methods of management, which help to realize the functioning of economic laws in particular conditions and provide the process of extended reproduction(^\text{11}).</td>
</tr>
<tr>
<td>A.N. Bichkova</td>
<td>Economic mechanism – an aggregate of management methods and coordination of subjects, which target function is rational management and formation of stable regularities in economics development(^\text{12}).</td>
</tr>
<tr>
<td>N.E. Pavlenko</td>
<td>Economic mechanism – a system of elements and aggregate of laws and tools of economic instruments (accounting, analysis, planning, regulating etc.), aimed on production, allocation and consumption of material and cultural requirements(^\text{13}).</td>
</tr>
<tr>
<td>D.V. Hodos, S.G. Ivanov, O.G. Dyachenko</td>
<td>Economic mechanism – a certain expression of active market laws of economic agents’ development at the production system, which is formed on the ground of governmental programmed policy. Economic mechanism of regional agro-industrial complex – a constantly developing system, which functions under the influence of market laws and governmental agricultural policy, unique external and internal regional factors, focused on its stable economic and social development(^\text{14}).</td>
</tr>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A.P. Mochalov</td>
<td>Economic mechanism of agro-industrial complex – an attitude system, which insures the aggregate cooperation of governmental and market forms, methods and ways of social productions regulating, aimed to provide innovational development of agro-industrial complex branches and focuses on solving of the global task of Russian food supply security assurance 15.</td>
</tr>
<tr>
<td>M.G. Ozerova</td>
<td>Economic mechanism of agro-industrial sector serves as an aggregate of connected resources of economic process at the controlled condition of agricultural sector, which assists the motivation of manufacturers’ production process and brings about saturation of domestic food market 16.</td>
</tr>
<tr>
<td>I.G. Ushachev</td>
<td>Organizational-economic mechanism of innovation process in agro-industrial complex “represents an aggregate of forms (parts) and methods of innovation activity execution, which interfacingly andconcertedly function and provide the main task execution of sustaining scientific-technological progress at the branch 17.</td>
</tr>
<tr>
<td>E.S. Oblogin, I.S. Sundoo, A.I. Trubilin</td>
<td>Organizational-economic mechanism of cattle raising development represents as aggregate of organizational, economic and legal component element of the branch functioning 18.</td>
</tr>
<tr>
<td>I.S. Kozaev, V.I Dement’ev</td>
<td>Organizational-economic mechanism of agricultural adjustment represents as a coordination system of economic relations, which occur between market participants during production, and aimed to secure its steadiness 19.</td>
</tr>
<tr>
<td>J.A. Akhmedova</td>
<td>Organizational-economic mechanism of enterprise management – an aggregate of organizational and economic instruments of management entity on controlled system for the purpose of desirable state achievement of controlled system by management decisions making, which provide the connection of the statics and dynamics 20.</td>
</tr>
</tbody>
</table>

The authors, who speak about organizational-economic mechanism, usually mark economic and organizational parts as its components. But the authors, who describe economic mechanism, do not deny its organizational element, appeared not only in function of processes organization but also in its performing and regulating institutes. The economic activity cannot be complete without its institutionalization, and the management process cannot be complete without realization of planning and organization functions. Economic mechanism appears through realization of concrete economic interests in one form or another, realization of such interests cannot be done without participation of those process subjects, who are represented, as a rule, as one organization form or another. Based on the

above, we can reach to the conclusion that the economic mechanism includes organizational element, does not require a certain emphasis on that, so the separation of “organizational-economic mechanism” only(confuses) the understating of these notions and duplicates them.

A.N. Syomin fairly notes, that “variety of economic mechanisms … reflects the condition of their functioning\textsuperscript{21}. Definition of different mechanism types, such as “economic mechanism”, “financial and credit mechanism”, “market mechanism”, “anti-recessionary mechanism”, “economic mechanism of management” and so on, connected with the condition of economy function environment in general and certain economic event in particular. A. Culmann wrote: “we can speak about the existence of a big number of economic mechanisms. If we assume that mechanisms are systems of relations between economic events, which occur at the specified conditions under the action of initial pulse, so in theory there can be as many economic mechanisms, as many different impulses in each system of connected events under specific conditions”\textsuperscript{22}. But separation of different mechanism types shouldn’t create confusion in conceptual construct, though there is no unity for this question among economics scientists.

At considering the economic mechanism of agro-industrial complex sustainable development, it is necessary to presume that any economic activity is defined by interests’ realization necessity of direct and indirect participants (subjects) of that activity. That can be both economic interests, which usually predominate at economic activity, and other – social, cultural, ecological and etc. Its realization comes to one or another form of production, exchange, distribution and consumption of benefits and services, which depends on society development level, productive forces and production relations. The participants of economic activity, whose interests are dominant, who set game rules and see to the treaty, gain maximum profit in the form of additional manufactured goods units, as a rule their privileged position depends on producer's goods ownership and possibility to influence on necessary laws passing. But other participants of the economic mechanism of management also realize their interests, but with less benefit. With absence of interests or possibility of their realization – there is no motivation, which brings into action all economic mechanism of management.

Wage-workers sell their labour capacity, and earned salary, which allows them to satisfy their physiological and social needs. Beside the possibility to buy different material values and services, for agricultural workers it is also important to know the value of agriculture work, understand the importance of supplying people with food and impossibility of whole society to survive without their labour.

Producers’ goods owner is interested in gaining additional benefit and capital increase, the state – in taxes and dues, ensuring food supply security and export of the production into international markets, consumers – in food quality improvement, enlargement of its availability.


Other firms, which form the market infrastructure, also have their own interest: banks, insurance companies, research and manufacturing combines, logistic companies and etc. Their united activity of private interests realization lead to economic growth both in the economy in general and in the branch in particular, improvement of standards and quality of population living.

The external and internal factors and conditions also influence on the economic mechanism of agro-industrial complex sustainable development and its participants’ activity.

Taking into consideration foregoing, it can be represented the following definition of this notion: economic mechanism of agro-industrial complex sustainable development is the process of interests realization of all productive process participants, both with consumers and state, through different forms of production, exchange, distribution and consumption of products, which are influenced by both internal and external factors. The economic mechanism of agro-industrial complex sustainable development is aimed at constant increment of added value.

Conditions and Factors Influencing on the Economic Mechanism of Agro-industrial Complex Sustainable Development

Let’s examine the main conditions, which have an impact on the activity of the economic mechanism participants. Among these are:

- Natural and climate conditions, where agriculture products manufacturers function. It should be noted that the output of plant products in the Russian Federation is partly situated in the area of risk farming, what increases insurance expenses. Animal production requires additional expenses for construction and service of special facilities, which exercise significant influence on product costs;
- Labour value in society. At the present time, “in mass culture age and “aestheticized” by help of keen advertisement consumption cult, the value of labour takes a back seat, and for many people the value of goods and life pleasure gaining stands in the foreground”\(^{23}\). To work is fashion-less and out of prestige for many persons. It specifically refers to agriculture production, where the labour is very hard, in spite of its mechanization, and intense, wages are low, social infrastructure is underdeveloped;
- Mentality. Russian mentality significantly differs from European or Asian, it makes a direct impact both at workers characteristics, and methods of business dealing. For example, communal system and serfhood do not encourage the development of individualism and entrepreneurial skill, but due to these factors Russian men can

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perfectly work with collective, industrious, obedient, what appeared as readiness to suffer harassment from heads.

- Foreign policy conditions. WTO accession, sanctions directly influence on state possible to help agriculture manufacturers, and demand conditions for agriculture product at the international market — on a sales level.

- Science and technology development level. Productive efficiency of agricultural labour both at crop growing and animal production depends on presence and availability of current technology, new animal breeds and plant varieties, current security features, innovation ways and technologies of products manufacture and etc. Government should give great attention to science funding, but in money-constrained environment and other priorities of state policy it isn’t worth to expect a scientific outbreak in these fields.

A number of internal and external factors also influence on the economic mechanism of agro-industrial complex sustainable development participants’ activity. It should be noted that external factors for one of the participant are internal for others.

The following external factors influence on the state acting as a participant of economic mechanism of agro-industrial complex sustainable development:

- international policy;
- competition at international food markets;
- business climate of foreign markets;
- investment attractiveness of both state in general and separate branches in particular.

Internal factors:
- national agriculture policy, special programs of agriculture development;
- taxation, financial, monetary and credit policy;
- investment environment;
- price formation, exchange equivalence in agro-industrial complex;
- insurance;
- land matters;
- legislation, which administers legal framework of economic mechanism participants’ activities, including labor legislation;
- demography situation.

The above given factors are external for agriculture manufacturers, firms-elements of agro-industrial complex infrastructure, workers and consumers. Activity of enterprises in agro-industrial complex, family-operated and private farms determine internal factors:

- availability of basic production assets;
- staff assistance of production and management;
- management (organization, motivation, planing, control, marketing, operational and strategic analysis, self-supporting relations between subdivisions);
- specialization and diversification;
- innovation, new technologies;
- cooperation and integration.

Russia is the federal state, so it necessary to consider regional activity aspect to external factors of agriculture manufacturer’s activity, including regional state support, elaboration details of regional agriculture development programs etc.

In addition to the above given factors, an important external factor, which influences on activity of firms-elements of agro-industrial complex infrastructure, is branch economic growth. It determines a number of orders and wage rates, possible to gain.

Internal factors are:

- organization and management;
- innovation, new technologies;
- staff assistance;
- resources provision;
- potential.

Workers and consumers at their actions are mainly subjected to external factors, which in many ways are the results of other participants of agro-industrial complex sustainable development economic mechanism activities. Among these are job status, its profitability, consumers' preference and etc. Among the internal factors it is necessary to note desire and necessity of different goods and services consumption. It directly determines the demand for labor activity and income maximization.

Thus, economic mechanism of agro-industrial complex sustainable development is a complex system, which is determined by activity of its participants on one side, and conditions and factors it exists in on the other side. Elements of that system interact during the interests’ realization and determine its appearance in the end.

**Process of Economic Mechanism Participants Interests Realization**

When we consider economic mechanism of agro-industrial complex sustainable development, it is necessary to pay special attention to problem of its participants’ interests realization process. The main interests of participants and the process of their realization are shown in the Figure 1.
The government is interested in taxes income increase, the raising of living standards in general and in the countryside in particular, development and improvement of countryside infrastructure, increase of agriculture products export volume, food security level and etc.

Agriculture enterprise, peasants and farmers – in profit growth, taxes and expenses reduction, and social commitments decrease. Also peasants and farmers, and a number of small agriculture enterprises reasonably mark low purchase prices for their products given by intermediators and processing companies. High markup of processing companies and commerce results in noncompetitiveness of produced goods and their inaccessibility for the majority of people. It is easier to find a way to ultimate consumer for big manufacturers, but they note the difficulty to work with distributive networks.

Workers of agro-industrial complexes are interested in gaining a competitive salary, decreasing of labor heaviness and intensity, increasing of life quality, including development of social, medical, educational and others infrastructures. Their availability and quality should enlarge in the countryside. The solution of these problems will automatically bring an increase of labor value for workers and decrease out migration from countryside.

Consumers are interested in the products price decrease and quality increase, alongside with their variety and availability.

Organizations and enterprises, which form the infrastructure of agro-industrial complex (banks, farm machinery manufacturers, leasing, insurance, logistic companies, research institutes, specialist training facilities and etc.) are interested in a number of orders increase and profit rise, what can be reached by either service cost advance, or volume of orders increase with cost permanence.
It is necessary to emphasize that the realization of these interests should be viewed for long periods, otherwise it is impossible to speak about the sustainable development of agro-industrial complex, because most of the process participants will be interested in “skimming the cream off” here and now, without realization of long-term strategies, projects and serious investments.

A detailed analysis of economic mechanism participants’ interests shows, that such interests can be exactly opposite: realization of some participants’ interests in corpore (for example, enterprises) can cause the discrimination for the other participants interests (workers, state and consumers). Therefore the particular role of the government should be mentioned, this role is in creating the system of measures, laws and institutes, which allows realizing their interest for all system participants in corpore without prejudice to the interests of other participants. It ought to be remarked that such a position should be reached by not using administrative levers for direct impact on economy and production participants, but creating of conditions where all economic mechanism participants can liberally function within the laws which are the same for everybody. Administrative levers of the state should be aimed at corruption decrease and its annihilation, service improvement of institutions, which provide the stability of legal and legislative framework, realization of government programs and etc.

To reach the sustained growth in economics it is necessary to create the conditions, in which all interests of economic mechanism participants can be realized. These conditions will result from following measures:

- creation of stable political and economic climate in the country, annihilation of corruption at all state levels;
- realization of reasonable government programs of agriculture maintenance, which can solve the problems of manufactured products realization by market enter simplifying for manufacturers of any size, markup reduction of both processors and intermediators, including trade networks;
- use of some federal taxes for improvement and development of social infrastructure in the countryside, which taxes are paid by agriculture manufacturers, for roads and hospitals, assistance to schools and cultural establishment or reduction of tax base for profit tax or unified agricultural tax up to sum which is spent for goals of infrastructure improvement.

Solution of the manufactured products distribution problem will lead to the achievement of necessary for extended reproduction level of profitability. This level is currently impossible to achieve for many agriculture manufacturers now, because subsidization of credit rates, insurance fees and etc. within the governmental agricultural support program do not solve the main problem of their activity – impossibility to predict the volumes and prices of sales. The development of social infrastructure and merited remuneration of labor will encourage attraction of skilled labour to agriculture and decrease the out migration of population.
from countryside. Stability of political and economic climate, corruption level decrease will lead to an interest of enterprises and farms in long-term strategies creation and realization, innovations, attracting investments

References
