

## **9. Features of the process of managing the grain subcomplex of the region in terms of local government reform**

Economic growth of communities directly depends on the development of the agricultural sector. It is not just about income from land lease taxes, it is strategically important to develop business on this land.

Most territorial communities are rural areas or the main part of which is as follows. It is clear that agriculture there is usually the main niche in the local economy or has such potential.

According to the Association Agreement between Ukraine and the EU, the agricultural sector in Ukraine continues to undergo a comprehensive course of reforms aimed at, inter alia, sustainable rural development, increasing the competitiveness of agricultural production, improving the quality and safety of agricultural products and conserving natural resources. Strategies for the development of the agricultural sector should define the long-term goals of these reform processes. Thus, they represent an important basis for the development of short-term and medium-term decisions in the field of agricultural policy [145].

Vinnytsia region has one of the most powerful agro-industrial complex in the country, which is based on 841 agricultural enterprises, 1,893 farms, 274,4 thousand individual farms. There are 4 research stations in the region, the Institute of Feed and Agriculture of Podillya UAAS, Vinnytsia National Agrarian University.

The number of people employed in agriculture is 215 thousand people. The number of full-time employees in agriculture in 2018 is 29,1 thousand people, in 2019 – 30,3 thousand people. The region uses 2012 thousand hectares of agricultural land, of which 1730,5 thousand hectares of arable land, 48 thousand hectares of perennials, 48,8 thousand hectares of hayfields, 183,9 thousand hectares of pastures. In terms of the size of agricultural land, the region ranks 9th among the regions of Ukraine.

In recent years, there has been a tendency in the region's agriculture to increase the volume of agricultural products and transform agricultural production into a profitable and high-tech business [146].

The transformation processes taking place in the agro-industrial complex of Ukraine require the study and research of all areas of change in its structure, especially those industries and sectors that are responsible for the lion's share of agricultural revenues. A special place here is occupied by grain farming. Therefore, to solve the urgent problems of increasing the production of grain and products based on streamlining the organization of management, improving market infrastructure, logistics, cooperation and integration in the field of market relations, it is necessary to improve existing and develop new mechanisms for managing reproduction in this area.

The strategic task of development of the domestic grain economy of Ukraine should be to fully meet its own grain needs (taking into account its needs for livestock production) and increase export potential, preferably not in feed grain, but in processed products, livestock products or bioethanol, added value to the state, increase the number of jobs, get closer to solving social problems of rural communities.

Due to its specifics, sensitivity to external influences (weather conditions, seasonality, economic situation, world market conditions, grain production volumes in other countries), the grain subcomplex is organically instable. It is likely that absolute stability and efficiency of this industry will never be ensured, but the real problem is to reduce fluctuations in grain production, ensure stable operation of the flour, cereal, feed, pasta and bakery industries.

Therefore, the study of the formation and development of management mechanisms as such requires a number of issues related to the sectoral nature of grain production management, the specifics of sustainable development and competitiveness of the industry, the need for infrastructure for agricultural and processing enterprises in market conditions.

Building a management system is determined by the nature of the problems that need to be addressed. The task of the subject of management, including in the field of grain products, is to, knowing the objective laws, consciously, in strict accordance with them to influence the managed object. The effectiveness of management is determined by how well they understand and ensure the interaction of management activities and

objective laws of development of social production. Different aspects of management relations are interdependent and interact.

The general laws of management in the grain product sector include:

- proportionality, optimal ratio of system components;
- rhythmicity, continuity of movement of production assets in circulation and circulation;
- the optimal ratio of centralization and decentralization;
- optimal link management system.

The management of the grain subcomplex of the agro-industrial complex as a complex economic system must take into account the principle of hierarchical goals of its participants, as the goals of management entities of different levels may contradict each other. Thus, the desire to make extra profits from grain exports contradicts the task of providing the country's population with cheap food. The goals of business owners who seek to increase the capitalization of their enterprise or reduce the cost of production may be an obstacle to greening production that meets the interests of society as a whole.

As the main functions of the grain subcomplex, the completeness of which depends on the effectiveness of management, V.O. Burnukin proposes to highlight:

- providing the population with grain, flour, cereals, bakery, pasta, etc. grain processing products;
- providing the livestock industry with feed grain, grain waste, feed and by-products;
- providing industrial enterprises with raw materials: grain and by-products;
- creation of a system of effective regulation of resource provision of enterprises of the subcomplex;
- formation of a mechanism for regulating the volume, range and quality of grain produced and products of its processing;
- development of tools for state regulation of the grain market and the formation of food funds;

- ensuring equal relations between the branches of production, storage and processing, ensuring the priority development of the grain sector of agriculture;
- coordination of credit, investment and insurance activities within the subcomplex, attracting monetary resources and control over their use;
- ensuring the protection of the subcomplex from the arbitrariness of monopolies and monopoly enterprises;
- creation of a system of legal and regulatory support for the functioning of the subcomplex [147].

In our opinion, it is impossible to fully agree with this position, because only part of the above functions can be attributed to the functions of the grain subcomplex. At the same time, the creation of systems of legal and regulatory support, development of tools for state regulation of the grain market, ensuring protection of the subcomplex from monopolies are functions of state management of the industry, not the functions of the grain subcomplex. Therefore, to consider as criteria for the effectiveness of the organizational and economic mechanism of management of the grain subcomplex at the macro level the completeness of its functions, which include:

- providing the population with grain, flour, cereals, bakery, pasta, etc. grain processing products at the level of scientifically sound standards;
- providing the livestock industry with feed grain, grain waste, feed and by-products;
- providing industrial enterprises with raw materials: grain and by-products;
- providing ecological living conditions for the population;
- ensuring food security of the state by creating a food reserve and reducing dependence on food imports;
- ensuring the balanced development of the subcomplex on an innovative basis;
- on the basis of equal relations between the branches of the grain subcomplex and equalization of competition conditions of all market participants to ensure favorable conditions for sustainable development of all branches of agriculture.

Based on the above, we propose a hierarchical system of indicators for multilevel evaluation of the effectiveness of organizational and economic mechanism for

managing the grain subcomplex of agriculture at the micro, meso and macro levels can be considered on the basis of a hierarchical system of indicators (Fig. 1).

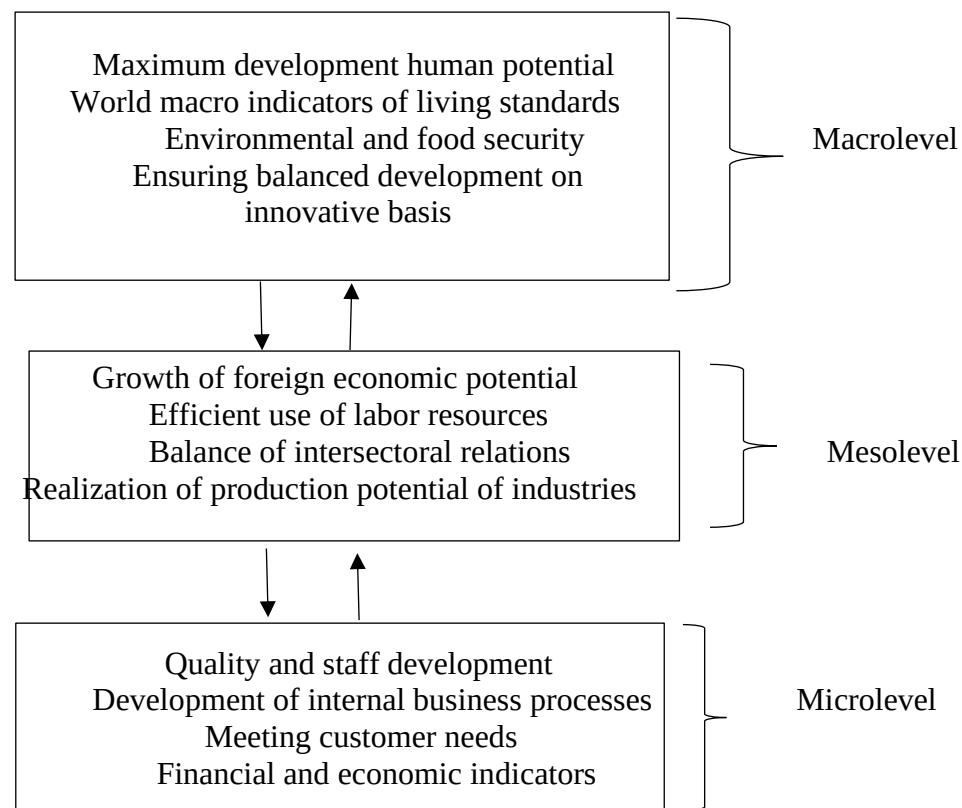


Fig.1. Hierarchical model of multilevel evaluation of efficiency of organizational and economic mechanism of management of grain subcomplex of agro-industrial complex at micro-, meso- and macro-levels

Source: suggested by the author

Thus, adherence to the principle of taking into account the hierarchy of goals (with the dominance of national interests) will reconcile the goals and interests of different levels of government with the national interests of food security, equalization of competition, sustainable development and more.

The system of aspects, criteria and indicators of efficiency of grain product subcomplex management is given in table 1.

Table 1

System of aspects, criteria and indicators of efficiency of grain product  
subcomplex management

| Efficiency of grain product subcomplex management |                                                                                                                                                |                                                                                                                                                     |                                                                                                                                       |                                                                                                                                                                                                                                                      |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aspect                                            | Economic                                                                                                                                       | Technical                                                                                                                                           | Social                                                                                                                                | Environmental                                                                                                                                                                                                                                        |
| Criteria                                          | Optimality of the combination of factors that minimize the cost of production                                                                  | Obtaining the maximum output at available costs                                                                                                     | Satisfaction of economic and social needs and interests of employees of agricultural enterprises                                      | Greening the nature of the interaction of production and nature, minimizing the loss of natural resources                                                                                                                                            |
| Indicators                                        | The level of satisfaction of market needs, the volume of marketable, net, sold products, the amount of profit, profitability, resource savings | The level of capacity utilization, the cost of gross and marketable products per 1 UAH. fixed and working capital, 1 ha of sown area, savings index | The level of improvement of working and living conditions, increase in the number of jobs and employment, the dynamics of wage growth | The share of waste disposal, the level of implementation of non-waste technologies, the degree of compliance with standards of the impact of chemical factors on the environment, the possibility of restoring natural resources, resource intensity |

Source: Compiled by the author on the basis of generalizations of scientific literature

Among the main specific features of agricultural production in modern conditions, which have a significant impact on the tasks, functions, methods and tools of management and should be taken into account in the formation and development of mechanisms for managing grain production, should be noted as follows.

Land in agriculture is not only the object of labor, as in other sectors of the economy, but also the subject of labor, the main means of production. This determines the territorial dispersion of production, settlements, construction of government agencies mainly on the territorial-production principle. Direct management from a single center is virtually impossible.

Territorial dispersion of production and the remoteness of structural units from the center, the length of communications complicate the collection and processing of information, require expanding the independence of enterprises.

Economic reproduction in agriculture is closely intertwined with natural, which makes it more dependent on natural and climatic conditions and requires the implementation of zonal farming systems.

Production cycles, as well as their duration, are largely related to natural biological processes, which is manifested in the seasonal nature of production, sharp fluctuations in the use of material, labor, financial and other resources during the year. The variety of forms of ownership and management determines the formation of their inherent governing bodies while developing horizontal coordination links to address common issues in the territory where these farms are located (joint services, social and cultural sphere, etc.).

The current structure of the grain subcomplex of Ukraine differs from those in developed countries. The basis for the formation of the grain subcomplex of Ukraine is grain farming, which accounts for more than 50% of the subcomplex's output. For comparison: in the United States, the grain sector provides only 13% of the gross output of the subcomplex, and 73% of the value of grain production falls on the grain processing and marketing industries.

Grain production in Ukraine for a long historical period is one of the main places in the development of agriculture as an industry that has priority in ensuring food security of the state, serves as a raw material base for many industrial goods, is an important source of feed for livestock development, plays decisive role in the formation of export supplies of food products. Natural and climatic conditions and fertility of the land of Ukraine make it possible to obtain high-quality food grain in quantities sufficient to meet domestic needs and build export potential. Based on the agricultural specialization of Vinnytsia region, its importance in the production of grain and products of its processing was chosen to analyze trends in the development of grain subcomplex as typical for Ukraine. Vinnytsia region occupies 26.5 thousand square meters. km. Vinnytsia region occupies only 4.5% of the country, but due to its

favorable location in the forest-steppe zone, sufficient rainfall, high plowing, the predominance of chernozems (gray, brown, podzolic) is an incredibly attractive region for farmers and large agribusinesses. In the structure of crops in Vinnytsia in 2018, grain crops occupy 52.9%, in 2019 - 54.2%.

In terms of agricultural production, the region occupies a prominent place in the state's economy from year to year.

Prospects for further development of the region's grain economy depend on domestic and global market trends. The rapid increase in Ukrainian grain exports leads to the analysis of these trends. A comparison of Ukraine with other leading grain exporters shows that the share of Ukrainian exports, which accounts for 45.6% of grain production, is one of the largest in the world. Only Argentina (69.3%) and Canada (68.3%) export even more of the grain grown.

The comparison with the largest grain producers in the world, the analysis of the structure of domestic grain consumption by individual countries - grain exporters allows us to formulate another additional argument in favor of the thesis of the need to increase domestic grain processing. The state strategy for the development of the grain complex in the context of globalization should be based on the fact that one of its main priorities should be not so much to increase exports of low-quality grain, as to ensure the export of processed products.

Sub-programs to expand the capacity of the domestic market of grain sub-complex products, which can be implemented at both the national and regional levels, can enable the full load of the food industry enterprises of the grain subcomplex. You can offer a program of food aid to the population living below the poverty line, which will focus on reimbursing the cost of food of domestic origin in specialty stores or supermarkets. Many countries have a variety of school nutrition programs. It is advisable to introduce other food programs in Ukraine, such as supplementary nutrition programs for pregnant women, women in the pre- and postpartum period, infants, children, adolescents from low-income households. The criteria for participation in such programs should be the level of net family income, which is below 100% of the poverty line (in 2020 - 3845 UAH per person). In conditions of extremely low income,



Ukrainians can receive up to 45% of the population. Financial resources under such programs can be allocated from the state or local budget and distributed through plastic cards, which will be circulated in a special payment system for electronic transfer of subsidies.

The existing system of stimulating the export of grain and products of grain processing in Ukraine needs a separate rethinking and reform. An existing mechanism that actually pushes grain products out of the country instead of sending them for processing to the food industry or using them as a feed base for livestock and gaining added value. This is due to the fact that since 01.01.2012 and for quite a long time the mechanism of VAT refund to exporters of agricultural products, which puts processing companies in an unequal position. The processing enterprise pays to the budget the difference between "output" VAT (20% of revenue from sales) and "input" VAT (20% of the amounts paid to grain producers for their grain). At the same time, an exporter who bought grain crops from agricultural enterprises without "outgoing" VAT (because export transactions are exempt from VAT) is entitled to a refund of "incoming" VAT [148].

Therefore, exporters, having such a refund, could buy grain from producers at prices higher than processing plants. As a result, grain that could be processed into cereals, baby food, bakery products, cookies, biodiesel, used to increase livestock production, was exported at the lowest prices.

On February 24, 2021, the Law of Ukraine "On Amendments to the Tax Code of Ukraine on the Value Added Tax Rate on Transactions for the Supply of Certain Types of Agricultural Products" was published.

The law stipulates that the value added tax rate will be reduced from 20% to 14% when supplying certain types of agricultural products to Ukraine for export and import into Ukraine.

The list includes mostly raw materials, which are mainly exported - either directly or through processing, and are mostly not sold to the final consumer in Ukraine.

These include wheat, rye, barley, oats, sunflower seeds, rapeseed, flax, corn, soybeans, sugar beets, as well as whole milk, cattle and live pigs.

The lion's share of these goods is either in itself a "golden" fund of Ukrainian agricultural exports, or is a raw material for goods, the export of which provides Ukraine with leading positions in world agricultural markets.

The need to increase the economic and social efficiency of the agro-industrial sphere of the regions while maintaining proper environmental security and preserving natural resource potential requires the application of new management models and sustainable development.

The modern agricultural sector of the economy is characterized by various forms of cooperation and integration, characterized by the emergence of vertically integrated entities, agro-industrial holdings, etc., the next form at the hierarchical level of which are cluster structures represented by a large number of small agricultural enterprises and farms. It is in these small enterprises that the main share of rural employment is concentrated. Today it is necessary to preserve this segment of agricultural production as a carrier of the sphere of employment of the rural population, its income and preservation of the rural identity of our region and the development of rural areas. At the same time, the diversity of such small agricultural producers often leads to significant losses of the final benefit from the sale of their own products due to the inability to form a fair price for it and due to competition between such producers. That is why the cluster approach in the implementation of the strategy of further development of agricultural production in the region is one of the most attractive for its future prospects by combining efforts to improve the efficiency of production activities [149].

As you know, the application of the cluster approach involves voluntary formation integrated structures in certain territories of the participants performing different functions, but united by one technological process, the result of which is the final product, created by the efforts of all participants in the process, from those involved in research and development, and ending with technologists, packers and dealer network.

In works on cluster issues M. Porter identified three main groups of characteristics of the clusters that provide improving the overall economic situation and increasing the national competitiveness of any country:

1. Clusters increase productivity enterprises in the area where they were established.
2. Clusters increase the pace of innovation and determine their direction, so create a foundation for future economic growth.
3. Clusters stimulate the creation of new ones enterprises, and this fact contributes to the increase and strengthening of the cluster [150].

The economic and organizational essence of the grain cluster is to cooperate in the efforts of grain growing, storage, processing, financial, research, training, trade and logistics structures and government agencies for efficient production and sale of products, social development and preservation and restoration of natural resources. resource potential [151].

Improving the sustainability of grain production and sales processes in the grain subcomplex of Ukraine can be achieved through the implementation of the model of regulated grain cluster in the country. In fig. 2 shows the structure of the relationship between the development of the grain subcomplex and the development of the grain cluster.

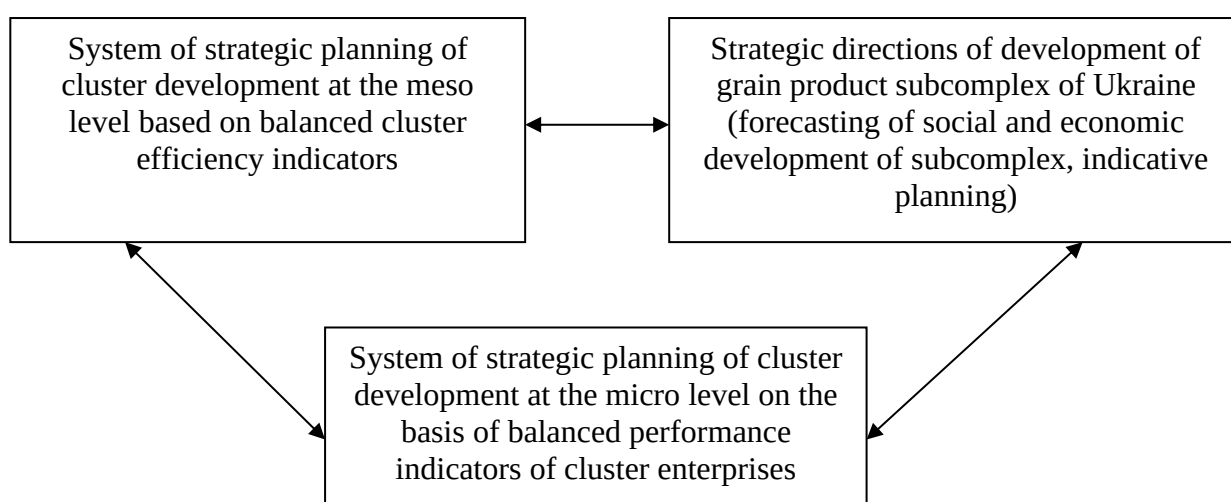


Fig. 2. The structure of the relationship between the development of the grain subcomplex and the development of the grain cluster

Source: formed for [151]

Effective functioning of clusters embedded in the agri-food sector of regions, not only increases the economic performance of regions and countries in general, but also solves food security, unemployment, shadow processes in the study area, biased income distribution among agricultural market participants, achieve sustainable development [152].

The strategy of economic development of the region's agro-industrial complex is an integral part of the overall development strategy of the region, it includes directions of development, ways and means of strategy implementation, private strategies, strategic analysis, forecasts, programs, monitoring. The implementation of the strategy may change in the absence of agricultural policy, prospects and a clear plan for economic development of the region, as economic and investment policy can not detail the direction of development plans for agricultural development in the region and analysis of environmental factors [153].

When developing a state strategy, one should take into account what key growth points exist in the subcomplex and what different interest groups may offer for their development. The need for the development of each individual cluster should be spelled out in the regional strategy, which is based on the consensus between business and administrative elites on the need for cluster development.

Despite the fact that agricultural clusters in Ukraine are called a very promising movement, the strategy of agricultural sector development does not create a solid basis for the development of the clustering process.

By the end of 2021, more than 75 countries are developing and supporting cluster development programs. The European Union is developing its economy through clusters. For example, Finland is fully clustered, with nine clusters, and the Dutch economy is divided into 20 "megaclusters", which determine the priorities of the state's innovation policy. There are 29 clusters in Denmark, with 40% of all companies in the country accounting for 60% of exports.

Expert M. Makhnovets identified 13 main obstacles to clustering:

1. Lack of legal regulation of cluster organizations in Ukraine.

2. In contrast to cooperatives, where it is less and less clear, there is no definite concept of cluster organizations, no strategy for their development and financial support from the state.

3. Lack of understanding of the definition of "cluster", "cluster initiative" and "cluster organization" (because these are different things from cooperatives and industry associations) at the regional level, so clusters in the regions are still not a priority.

4. Lack of specialty or course of cluster manager in universities and research institutions.

5. "Smart specialization" or strengths of specific territories in the regions are still not identified and officially approved.

6. Lack of experience in working with EU grants and lack of awareness of the possibility of co-financing from international development projects.

7. Reluctance of farmers and players in the agro-industry to unite.

8. Separation of science from business

9. There is no long-term result orientation at the level of companies and organizations.

10. Willingness to give% of sales, not to use the services of marketing and development of innovative solutions in the agro-food sector.

11. The idea of "competing by interaction" is still not accepted by agribusiness.

12. Concentration during the creation of the organization is more on the statutory documents and levers of influence of specific individuals, rather than on the processes of the organization.

13. The cluster development initiative in Ukraine is really moving due to the very limited number of enthusiasts both at the state level and at the level of public organizations and individuals who want to make changes in the system of regional economic development [154].

The system of balanced indicators, which is shown in fig.3, can be a tool for assessing the prospects for the development of the regional grain cluster and the territorial-industrial complex.

| The system of prospects for the development of the grain cluster                                                          |                                                                                               |                                                                                                                                         |                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Customer perspective,                                                                                                     | growth perspective,                                                                           | process perspective,                                                                                                                    | finance perspective                                                                                         |
| Satisfaction of consumer needs; integration of science and business; growing demand for research, development, innovation | Increasing the market value of enterprises; staff development and training; employment growth | formation of local and intra-firm networks; development of the necessary infrastructure; intersectoral cooperation; industry leadership | Increasing the level of investment; enterprise development and grain food market; growth of budget revenues |
| Grain cluster strategy                                                                                                    |                                                                                               |                                                                                                                                         |                                                                                                             |

Fig.3. The system of prospects for the development of the grain cluster

Source: developed by the author

As noted by O.M. Odintsov, organizational and economic mechanism of development of agro-industrial cluster provides a number of requirements and features of its structure, which require:

- to formulate the list of requirements to the purposes of cluster formation;
- to determine the model of structuring the goals of the organization;
- to carry out quantitative and qualitative assessment of the goals of cluster formation;
- identify the target elements of the management system and the object of management;
- to determine the features of goal formation;
- to determine the composition and sequence of the general functions of management in the functioning of the organizational and economic mechanism [155].

Economic development based on stimulating clusters is possible only with the initiative and joint efforts of business and administrations.

The role of government agencies can be to support and initiate cluster activation processes, as regional administrations are almost always involved in the formation and operation of business, and business must influence the administration.

Targeted programs, including regional ones, can have a significant impact on the development of the cluster. For Vinnytsia region, we can propose such an organizational and institutional model of the structure of the grain cluster (Fig. 4).

The first group of cluster members consists of buyers, which in the grain market are processing enterprises, procurement organizations that purchase, store, process grain and sell grain products, wholesale trading companies.

The second group of subjects of the grain cluster is formed by producers of grain products - agricultural enterprises, peasant (farmer) farms and their associations.

The third component is a developed infrastructure represented by a network of highly organized forms of trade (exchanges, fairs, auctions, wholesale markets), financial institutions (banks, investment funds, insurance companies), as well as support and service organizations (legal, consulting, marketing, etc).

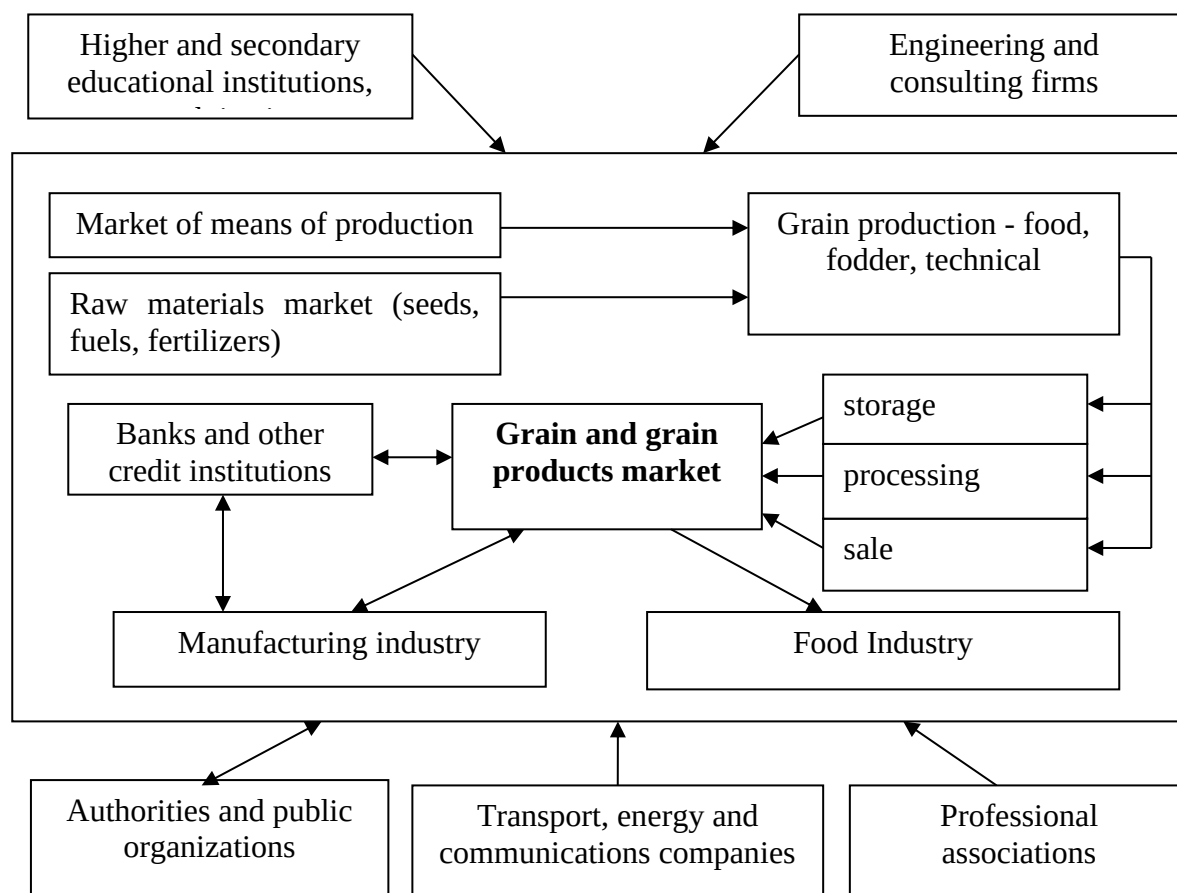


Fig.4. Organizational and institutional model of the grain cluster structure in the grain subcomplex of Ukraine

Source: formed by [151]

The main problems and negative trends of the agricultural sector of the region are identified as follows:

- deformation of the production structure;
- low efficiency of agricultural enterprises;
- deformation of price proportions;
- critical depreciation of fixed assets;
- insufficient state support for agricultural producers;
- insufficient attention from the state to the social development of the village;
- irrational use of agricultural land resources, reduction of land fertility due to insufficient environmental and agro-technical measures in land use.

There is also a lack of support for small farms, agricultural service cooperatives and other organizational forms of small and medium-sized enterprises in rural areas - as this is a prospect for the development of rural areas and increase employment in rural areas.

The analysis of the recently adopted programs of socio-economic development of Vinnytsia region showed the absence of a special program in the region, aimed at supporting the development of the grain subcomplex. Instead, to the negative trends in the development of the agricultural sector of the region should be added a number of phenomena identified by us in the analysis, including:

- strengthening of disparities in the distribution of profits between enterprises of different branches of the subcomplex;
- reduction of profitability of processing enterprises in comparison with infrastructure enterprises;
- increasing the share of shadow channels for grain sales;
- low grain quality, predominance of feed grain.

The existing mechanism of management and regulation of the grain subsector in Ukraine does not create sufficient conditions for domestic producers to carry out the processes of expanded reproduction based on the transfer of the industry to an innovative path of development, greening production, improving product quality. This



is especially true for grain producers and grain recycling companies that produce new products with new consumer properties.

The main reasons for the inefficiency of the existing mechanism include the following:

1) primary grain producers receive only 30 - 40% of revenue from the final (retail) price for their products;

2) at the stage of export is formed up to 70% of total profits from the sale of agricultural products on the world market, and the expenditure part of this link in most products does not exceed 20%;

3) financial flows of multisectoral business entities in the grain subcomplex do not correspond to the value added of goods created by them.

The consequences of the existing disparities in the distribution of income of the subjects of the grain subcomplex are as follows:

1) strengthening of financial instability and riskiness of grain economy, lack of income, undermining of financial potential of development on an innovative basis;

2) the existence of export rents in favor of foreign TNCs, which is not in the interests of the state;

3) degradation of the grain processing sub-sector leads to an increase in imports of grain processing products (cookies, gingerbread, confectionery, etc.) at inflated prices, which leads to a deterioration of food security indicators;

4) due to the predominance of grain exports rather than products of its processing in Ukraine, economic, environmental and social problems remain unresolved, especially for the population of rural areas;

5) additional direct and indirect losses of the state are generated to support the income of farmers, increase social benefits, etc.

In order to accelerate the solution of these problems at the regional level, we propose to develop a conceptual framework for the development strategy of the grain subcomplex of Vinnytsia region until 2030, which can be used for other agricultural regions of Ukraine. We offer the following sections of the strategy for the development of the grain subcomplex of Vinnytsia region until 2030:

1. Grain subcomplex of Vinnytsia region: state and trends.
2. Identification of problems of development of the grain subcomplex of the region.
3. The main problems of socio-economic development of the region, affecting the functioning of the grain product under the complex.
4. Principles of strategy implementation.
5. Strategic goals and priorities for the development of the grain complex of the region until 2030.
6. The mechanism for implementing the strategy.
7. Stages of strategy implementation.
8. Monitoring of the strategy and control over its implementation.

The strategy should take into account the peculiarities of globalization and strengthening the participation of the agricultural sector in the international division of labor, as well as our results of assessing the effectiveness of organizational and economic mechanism for managing the grain subcomplex of Vinnytsia region.