

# MANAGEMENT OF THE AGRICULTURAL ENTERPRISES' COMPETITIVENESS IN THE CONTEXT OF FOOD SECURITY

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**Abstract.** In the modern conditions of globalisation and transformation, food supply, food safety and development of the agricultural sector are the determining factors of stability. The country's agriculture requires increased competitiveness and the formation of competitive advantages, and agricultural production is one of the risky types of business activity. The insufficient level of development of enterprises in the agricultural sector is due to the need for a system of effective mechanisms for managing the development and competitiveness of agricultural enterprises. *The aim* of the publication is to study the trends in the development, formation and functioning of agrarian enterprises in the current realities and to develop a mechanism for managing the competitiveness of agrarian enterprises. *Results.* The paper considers the issues of peculiarities, trends in the development and functioning of agricultural enterprises in modern conditions. The essence of the concept of competitiveness and peculiarities of formation of competitiveness of agricultural enterprises are defined. An assessment of agricultural production is carried out and an analysis by groups of producers is carried out. The dynamics of the number of agricultural enterprises for 2008–2021 was determined. Factors influencing the formation of competitiveness of agricultural enterprises and the place of Ukraine in the world ranking of exporters of agricultural products have been studied. The essence of the mechanism of managing the competitiveness of agricultural formations is substantiated. A model of the mechanism of managing the competitiveness of agricultural enterprises was developed, including economic, organisational and legal subsystems. *Conclusions.* The existence of competitive advantages is an essential aspect of competitiveness, and increasing the level of competitiveness of agricultural formations and optimising their functioning in conditions of uncertainty is a priority direction of the agricultural sphere of the national economy. Competitive agriculture should ensure the country's food security and contribute to the effective development of rural areas.

**Key words:** food security, agricultural enterprises, competitiveness, competitiveness management mechanism, state regulation, market regulation.

**JEL Classification:** L66, Q10, J50

## 1. Introduction

In today's globalised world and the transformation of socio-economic and socio-political processes, the fundamental factor of stability is ensuring food and nutrition security and the level of development of the agricultural sector. Domestic agriculture needs to improve its competitiveness and build competitive advantages not only in the domestic but also in foreign markets.

Agricultural production is one of the riskiest types of business activity. Agrarian reform, the establishment

of market relations, changes in ownership and business forms, and the opening of the land market increase the degree of uncertainty in socio-economic processes in agriculture, while martial law and military operations significantly increase the impact of risks on agricultural business. The insufficient level of development of agricultural enterprises in the country is due to the lack of a system of efficient and effective mechanisms for managing the development of agricultural enterprises. In this regard, the main task of management in the languages of a market economy

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is to transform the management of competitiveness of agricultural enterprises into an effective economic tool for the development of enterprises in the agricultural sector of the national economy.

The fundamental aspects of the study of various aspects of enterprise competitiveness and the development of competitive advantages, including the agricultural sector of the economy, are covered in the scientific works of a significant number of domestic and foreign well-known scientists, in particular, Aranchiy V. I., Haidutsky A. P., Gutorov O. O., Kotler F., Lamben J. Zh., Lupenko Y. O., Malik M. Y., Mintsberg G., Sablyuk P. T., Taylor F., Waterman R., Chamberlain E., Schumpeter J., Yatsiv I. B., Cherevko G. V., and others.

However, a wide range of theoretical, methodological and practical issues related to the systematic study of assessing the effectiveness of entrepreneurial activity in the agricultural sector and improving the management of the competitiveness of agricultural enterprises in modern conditions remains uncertain and controversial.

In today's environment and new concepts of development of society and national economic systems (the concept of sustainable development, social responsibility of business, green economy, etc.), the content of competitiveness is often complex and controversial. In their interpretation of the essence of the category "competitiveness", international organisations define the critical factors of a consistently high level of employment, resource productivity and economic growth potential (Mulatu, 2016; Hatzichronoglou, 1996).

With the active spread of the concept of sustainable development, scientists are studying competitiveness from a comprehensive perspective of combining social, economic and environmental factors, which have become increasingly important in recent years as factors in ensuring the strategic competitive advantages of goods and companies in the market (Jiao et al., 2020; Kleindorfer et al., 2005; Lacy et al., 2010). Most scholars agree that the main drivers of competitive advantage are innovations, which today and in the near future are also socio-environmental and economic transformations that are beneficial for both business and society as a whole, and manifest themselves as sustainable innovations (Koutouzidou et al., 2022; Rodríguez-Pose et al., 2022, Deže et al., 2023, Vrabcová & Urbancová, 2023).

Bell et al. (2011) assess the price and non-price (quality, safety, environmental) competitiveness of agricultural producers by the efficiency of supply chains for all types of inputs. In recent years, corporate reputation and financial productivity have also emerged as managerial factors of company competitiveness, which form the potential for social responsibility of agricultural business (Kristoffersen

et al., 2021). The complexity, variability, and high dynamism of the external business environment factors objectively force enterprises to look for competitive advantages in organisational tools and ways to demonstrate public benefits to potential buyers. This, according to Chien & Chi (2021), has led to the emergence of "operational competitiveness" and "social service capability", which have already become drivers of competition at the corporate level of business management.

Strategic factors for ensuring competitiveness are human capital, knowledge, skills and continuous professional development of the personnel of agricultural enterprises (Chernoivanova et al., 2023). Meeting the needs of buyers (consumers) and gaining competitive advantages also requires an effective marketing strategy and tactics for the enterprise in the market (Bondarenko, 2021). Formation of factors ensuring competitiveness and achieving competitive advantages for agricultural business entities is possible only with an effective investment policy of management (Iastremska et al., 2023). Taking into account the specifics of agricultural production and the exceptional importance of this industry for ensuring food security and achieving the goals of sustainable development, scientists also study the competitiveness of the agri-food industry through the impact and effectiveness of the provision of state financial support (Arisoy, 2020).

According to Shu-Yi et al. (2023), the competitiveness potential of agricultural companies (farms) is determined by the availability and efficiency of coordination and distribution of financial resources, which can be ensured through the creation of specific organisational, departmental coordination either at the level of farmers' associations or (in the case of large agribusinesses) at the level of corporate organisational management of the company. The eastern point of view is held by Oliveira & Wander, who in their research prove that agricultural cooperatives have a stronger potential for gaining competitive advantages than individual agricultural producers (Oliveira & Wander, 2022). New scientific approaches and theories increasingly consider the practical aspects of competition through the prism of integration processes and the search for common interests between competitors to better meet the needs of consumers and society (Cozzolino & Rothaermel, 2018). Such an association of business interests involves the integration of various resources, knowledge, capacities and intellectual capital of business entities, which, with the help of modern technological interfaces, complement each other and form a powerful potential for competitiveness within the framework of value chains (Lançon et al., 2017). Despite a large number of scientific developments and approaches to ensuring the competitive

advantages of agricultural producers in the market, the issue of increasing the level of competitiveness remains extremely relevant for Ukraine, especially in the context of intensified European integration reforms and difficult business conditions today.

The purpose of this publication is to assess the trends in the formation, functioning and development of agricultural enterprises and to develop ways to improve competitiveness management in today's complex realities.

## 2. Analysis of the Competitiveness of Ukrainian Agri-Food Products

Agricultural production is considered to be a complex of industries aimed at the production and processing of agricultural raw materials; it is one of the priority values within the policy framework of stabilising the economy and ensuring the country's food security. Agriculture, which is a set of economic sectors related to the supply of the country's population with food and agricultural raw materials for the processing industry, has the necessary resource potential to fully ensure food security and increase the volume of exports of agricultural products. Domestic agricultural production has all the necessary prerequisites for a further increase in production volumes. Currently, agricultural sectors have a significant share in the country's GDP and a share in total exports. Thus, in 2021, the share of agriculture in Ukraine's GDP was the highest among all sectors of the economy and amounted to more than 10%. The share in Ukraine's total exports was about 41% for the year (Agricultural production showed the highest growth in 2021).

It should be noted that during a long period of growth (2010–2019), analysing the dynamics of agricultural production for 2010–2022 (Figure 1), the total volume of production increased by 31%. In 2020, due to the cyclical nature of the agricultural industry, the turbulent economic situation and restrictions related to COVID-19, as well as

atypical climatic conditions, there was a decrease in production by almost 10%. In 2022, it has become impossible to carry out agricultural activities on a significant part of the agricultural land, as it is either occupied, under constant bombardment or mined (in 2022, the total sown area decreased by 20% compared to 2021) (Agricultural sector of economy). Significant levels of wartime pollution have resulted in large areas of food crops being taken out of production for an indefinite period.

The agricultural sector of the national economy is dominated by crop production, which accounts for almost 73% of agricultural output. Agricultural production is distributed between two groups of producers: agricultural enterprises and households (Figure 2).

In 2021, the first group of producers, which is the highest in terms of yields and agricultural output, produced 68% of gross output; the second group accounted for 32% of gross agricultural output. It is advisable to consider the dynamics of the number of agricultural enterprises, focusing on the peculiarities of the development and competitiveness of entrepreneurial activity in agribusiness. Thus, in recent years, the number of agricultural enterprises has declined sharply (Figure 3), with their number decreasing by almost 22% from 2008 to 2021.

Ukraine's agricultural sector has strong productivity potential and is actively involved in the agricultural and food markets. According to the US Department of Agriculture, in 2021 marketing year, Ukraine was among the top ten largest exporters in the world for such products as wheat, barley, corn, sunflower seeds and rapeseed (Table 1). This demonstrates the high level of competitiveness of agricultural products and their industrial processing.

Based on the analysis of the current state of development of the agricultural sector and maintaining positions on the market in the conditions of economic and socio-political crisis, the problem arises to increase the efficiency of activities and to

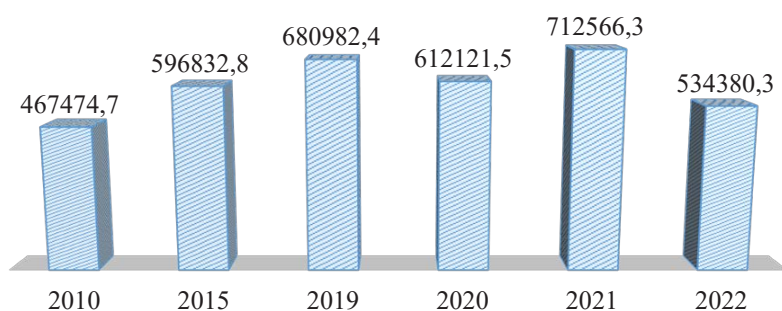


Figure 1. Dynamics of agricultural production (in constant prices of 2016, million UAH)

Source: (State Statistics Service of Ukraine)

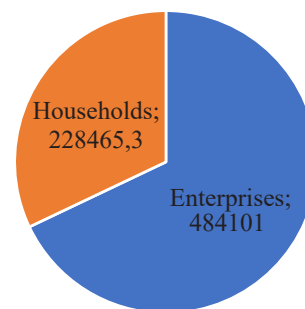
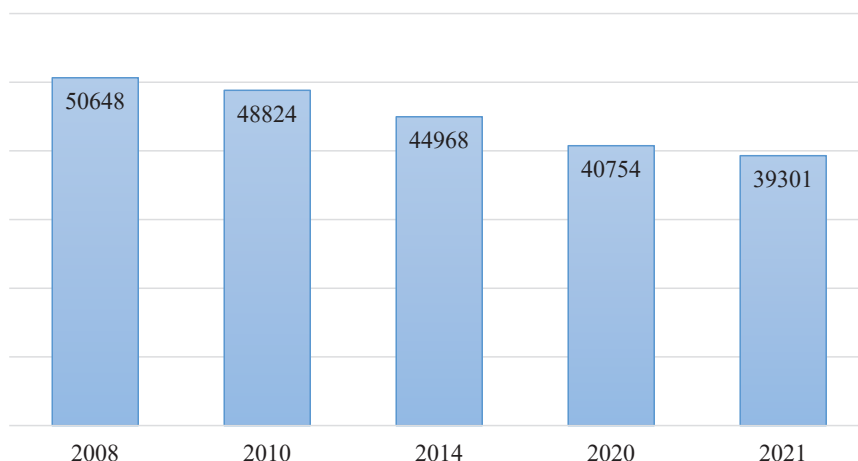


Figure 2. Gross agricultural production by commodity producer groups in 2021

Source: (State Statistics Service of Ukraine)



**Figure 3. Dynamics of the number of agricultural enterprises**

Source: (State Statistics Service of Ukraine)

Table 1

**Rating of Ukraine in the world agricultural market (2021)**

Types of agricultural products	Production			Export		
	Volume (1,000 MT)	Rank among global exporters	% of global exports	Volume (1,000 MT)	Rank among global exporters	% of global exports
Corn	41,900	6	3,5	23,000	4	12
Wheat	33,000	7	4,3	19,000	5	9
Sunflower	17,500	1	30,6	75	9	3
Barley	96,900	4	6,8	5,800	3	17
Sunflower oil	5,676	2	30,6	4,950	1	46
Sunflower meal	5,452	2	27,5	4,100	1	54
Rapeseed	3,015	6	4,2	2,700	3	20

Source: compiled by the authors under (Ukraine Agricultural Production and Trade. USDA. Available at: <https://www.fas.usda.gov/>)

survive in such harsh conditions. Therefore, it is necessary to create competitive enterprises that can provide consumers with competitive services and products faster, more economically, more clearly and adequately respond to market changes, introduce innovative technologies, improve the competitiveness management systems of enterprises and use the latest marketing strategies.

### 3. Formation of a Strategic Model for the Competitiveness of Ukrainian Agri-Food Products

In general, competitiveness is a systemic concept that combines production, financial, investment and other aspects of the functioning of enterprises and determines the relationship with internal and external factors. M. Porter believed that the competitiveness of a company is a comparative advantage over other companies, the ability of a subject of market relations to be on the same level in the market as similar competing entities available there (Porter, 1990). V. H. Shynkarenko and A. S. Bondarenko (2003) believe that the

competitiveness of an enterprise is a dynamic characteristic of the ability of an enterprise to adapt to changes in the external environment and at the same time provide a certain level of competitive advantage. Currently, there are many approaches to defining the categorical concept of competitiveness of enterprises. However, there is no single interpretation, as some researchers believe that the competitiveness of enterprises is a category that is directly determined by the characteristics of their products (Pidubna, 2007), while others take as a basis the efficiency of the production process or strategic planning of the enterprise's development, its ability to introduce new technologies, to compete with competitors in the sales markets, and so forth (Yankovy, 2013).

In this regard, the purpose of forming an effective system for managing the competitiveness of an agricultural enterprise is to achieve market advantages and forecast the development of leading competitiveness indicators, which will allow achieving the best product characteristics. Managing the competitiveness of an agricultural enterprise requires taking into account external and internal

factors that affect production and economic activity. External factors include the government's tax, financial, credit and investment policies; effective demand; market infrastructure; government policy towards domestic producers; product standardisation and certification; awareness of market conditions; and natural and climatic conditions. The internal factors that ensure the competitiveness of an agricultural enterprise are the competitiveness of its products, the financial condition of the enterprise, the marketing activities of the enterprise, the management and organisation of production, the size of the enterprise, and the introduction of innovations by the enterprise.

It should be noted that the following conditions contribute to increasing the competitiveness of agricultural enterprises: resource (availability of resource opportunities that allow obtaining products of better quality); tactical (a set of organisational, economic, scientific and technical developments that allow achieving more efficient use of available resources and reducing production costs and the cost of the final product); strategic (strategic decisions, enterprise development programmes that allow better use of available resources to achieve competitive advantages). In general, the above conditions will make it possible to achieve competitive advantages at any stage of the enterprise's development, while increased competition and high rates of economic development may lead to the loss of the achieved positions of the enterprise. Therefore, the attraction of intellectual, human and financial resources will strengthen the position of agricultural enterprises, and the development of competition will contribute to the increase in the level of competitiveness of products.

Therefore, a broad analysis of the main strategies for managing the competitiveness of enterprises provides evidence that the success of an agricultural enterprise is dependent on its level of competitiveness, which in turn is a key factor in achieving profitability and ensuring food security. The foundation of effective enterprise management lies in enhancing competitiveness, as this directly impacts practical operations. By prioritising competitiveness management and optimising the use of competitive potential, an enterprise can generate long-term benefits (Sitkovska, 2016).

The processes of forming strategic vectors for the competitiveness of agri-food products are complicated by active hostilities in a large part of Ukraine, damage to rural infrastructure and logistics, and mining of fields (Kramarenko, et al., 2022; Irtyshcheva, et al., 2022; Pryshchepa, Kardash, Yakymchuk, et al., 2020). It is the solution of these problems that should ensure the management of the competitiveness of agri-food products in the context of food security.

Studies have shown that in improving the process of managing competitiveness of enterprises in the agricultural sector of the economy, it is necessary to take into account the peculiarities of the development of the agricultural sector, which is based on agriculture, which depends on natural and climatic conditions, is a relatively static industry that adapts more slowly to changing economic conditions, and the capital invested in the industry provides a lower return than in other sectors of the economy. The global experience of developing a market economy convincingly proves that, due to their specific characteristics, both agriculture and the food market are self-regulating systems. Therefore, only market self-regulation can be the basis for the formation of a mechanism for managing the competitiveness of agricultural enterprises. At the same time, state regulation of the agricultural sector should not replace, but only supplement and adjust the market mechanism, coordinating the functioning of its elements.

When forming a mechanism for managing the competitiveness of agricultural enterprises, it is necessary to pay attention to the following main points. It is necessary to identify the current problems of agricultural sector development and the factors that hinder the process of increasing the competitiveness of agricultural enterprises, which will allow to determine the directions of increasing their competitiveness as components of the mechanism for managing the competitiveness of agricultural enterprises. The complexity of relations in the agrarian sector, which is determined by the diversity of object and subjective interests of participants in agricultural production, namely, agricultural, processing enterprises and the state, requires achieving the optimum in their interaction. Achieving the optimum is the main goal of the mechanism for managing the competitiveness of agricultural enterprises.

The model of the mechanism for managing the competitiveness of agricultural enterprises (Figure 4) includes economic, organisational and legal subsystems. The economic subsystem includes economic levers of influence on the competitiveness of agricultural enterprises through state regulation and market mechanisms.

Economic levers are the means and methods of managing the agricultural sector of the economy with the help of financial and credit instruments, taxes, price regulation, and investment policy, which are external mechanisms. The organisational and legal subsystem of the mechanism includes the creation of an effective functional system of management of business entities through the improvement of key management functions. This subsystem includes regulatory and legal support of

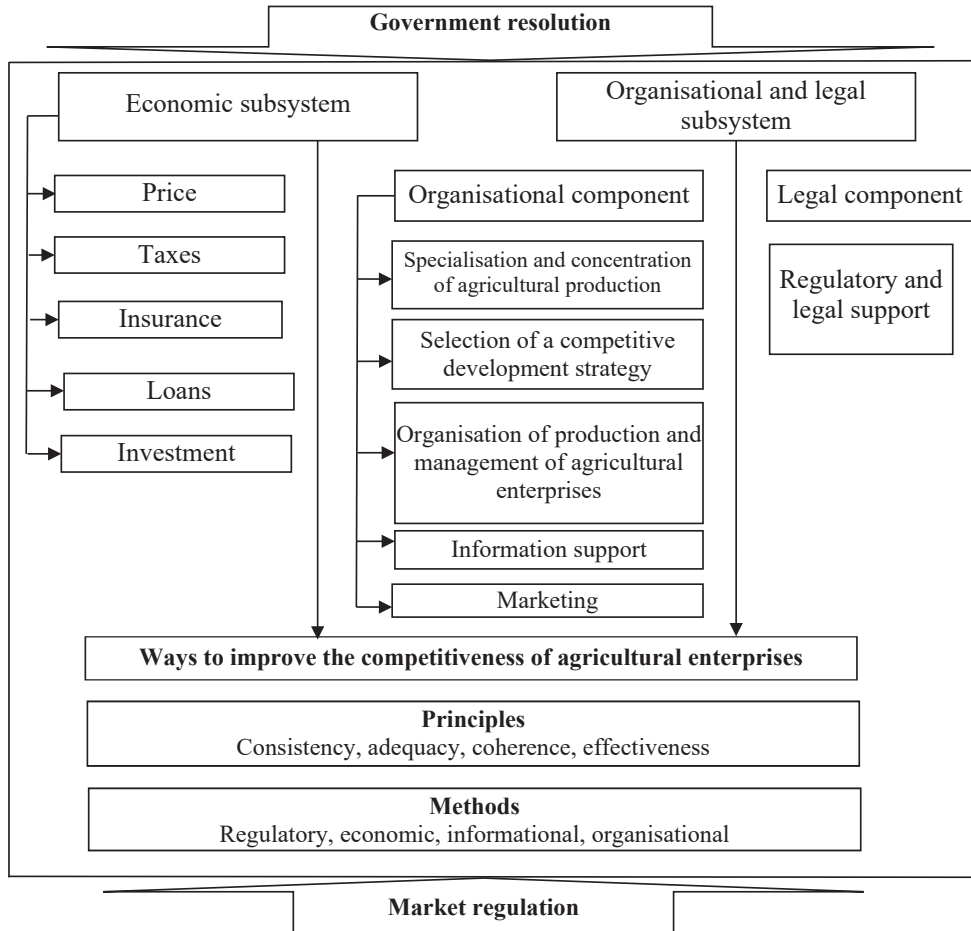


Figure 4. Model of the competitiveness management mechanism

agricultural enterprises, mechanisms of specialisation and concentration of agricultural production, selection of a competitive strategy for the development of an agricultural enterprise, mechanisms of organisation of production and management of agricultural enterprises, their information support and marketing mechanism. The organisational and economic mechanism for managing the competitiveness of agricultural enterprises as a management system should be formed on the basis of scientifically sound principles and methods.

Thus, the proposed model of the mechanism for managing the competitiveness of agricultural enterprises is a set of forms, methods, elements, methods of interaction and incentives aimed at improving the competitiveness of agricultural enterprises. Obviously, such a conceptual model, given the complexity and multifaceted nature of the problem of competitiveness of an agricultural enterprise, does not reflect all management methods with a high degree of detail, but allows for a systematic and targeted search for the most promising areas of improving the competitiveness of an agricultural enterprise.

#### 4. Conclusions

Having a competitive advantage is a significant aspect of being competitive, as it enables one to emerge victorious. Such advantages are strategically important for entrepreneurial activity in agribusiness. Increasing the competitiveness of agricultural enterprises and optimising their functioning in an uncertain environment is a priority for the development of the agricultural sector of the national economy. In order for an agricultural enterprise to occupy a leading position in the market, it is necessary to be ahead of competitors in innovation, production and sales, pricing, and cost reduction. Competitive agriculture should not only ensure the country's food security, but also contribute to the effective development of rural areas, ensure that all categories of farms perform social and economic functions, make maximum use of local natural and climatic conditions, traditions and interests of the rural population, increase employment, profitability and quality of life of rural residents, and take into account the realities of market relations.

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