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# The current status and prospects of growing plant-based food products in the present conditions of the Ukrainian agricultural sector

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Abstract. The agricultural sector in Ukraine plays a key role in the national economy, providing high-quality and sustainable food supply for the population. However, even with favourable natural and climatic conditions and extensive land area, the industry faces numerous challenges, such as war, economic instability, and loss of control over land resources. The purpose of the study is to analyse the current state of growing plant-based food products in Ukraine to identify key challenges and opportunities. To achieve this goal, the gross harvest, yield, and acreage of the main agricultural crops, the share of agricultural value added in the gross domestic product in Ukraine, and the value of agricultural exports to the European Union for the period 2015-2022 were analysed. The results show that sales volumes in agriculture increased by 75.9%, indicating a positive development of the industry. However, this positive development is accompanied by an increase in product prices, which can lead to inflationary pressures. The instability of the agricultural sector is confirmed by a sharp increase in the share of value added in 2021 and a decline in 2022. However, an important positive aspect is a significant increase in the yield and value of exports, which indicates the successful influence of the Ukrainian agricultural sector on international markets. The study shows that despite the existing challenges, the agricultural sector has demonstrated flexibility and adaptability, especially in the context of changes in acreage and crop production volumes. Measures aimed at introducing modern technologies, stimulating innovation, improving the level of education and developing export opportunities can become a catalyst for the sustainable development of the agricultural sector. The results obtained are necessary for the development of specific measures and strategies aimed at improving the situation in the agricultural sector of Ukraine and ensuring its sustainable development

Keywords: gross harvest; value added; competitiveness; export; agricultural production

# INTRODUCTION

The agricultural sector of Ukraine, as a key sector of the economy, plays a crucial role in ensuring food security and growing plant-based food products. This industry is not only an important component of national production, but also a determining factor for the country's sustainable development. Against the backdrop of global challenges such as climate change, limited resources and the need to ensure food security, Ukraine's agricultural sector is becoming a key player in solving these problems. The importance of ensuring the profitability and sustainability of agricultural activities requires an integrated approach covering economic, environmental

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and social aspects. Therefore, the relevance of this study is determined by the need to address the challenges facing the agricultural sector of Ukraine in the context of global trends. In particular, maintaining ecological balance, ensuring access to resources, and maintaining food security are becoming important tasks for which the agricultural sector should pay due attention.

According to Y. Danko et al. (2020), current trends in the cultivation of plant-based food products in Ukraine indicate the need to integrate the latest technologies, comply with environmental standards, and adapt to global challenges. Important aspects include ensuring product quality, efficient use of resources and, creating a sustainable agricultural sector that meets the requirements of modern consumers and considers environmental aspects. Maintaining and increasing the competitiveness of the Ukrainian agricultural market is conditioned by the innovation and improvement of cultivation methods aimed at creating environmentally friendly and safe products for consumers. In this context, I. Kulyk (2019) argues that it is important to analyse existing cultivation technologies, implement modern management methods, and consider the sustainable use of natural resources and the preservation of soil fertility. Achieving success in the agricultural sector of the Ukrainian economy will be determined not only by the volume of production, but also by the introduction of innovations aimed at increasing productivity and ensuring sustainable development of agricultural production.

H. Kvita et al. (2020) note that the analysis of the state of the agricultural sector and its interaction with plant production will help identify key problems and opportunities facing modern farmers and agricultural enterprises. Consideration of these aspects will provide an understanding of the factors that affect the efficiency of growing plant-based food products, and indicate ways to optimise production based on modern requirements. O. Krupchan & V. Korol (2022) also highlight the need to investigate and implement modern agricultural technologies, such as agricultural work, irrigation systems, fertiliser use, and plant protection, to ensure maximum productivity with minimal environmental impact. They also note the importance of ensuring high quality standards for plant-based food products, which affects their perception on the world market.

V. Dankevych *et al.* (2022) point to the complexity of the challenges facing Ukraine's agricultural sector and the need to integrate modern technologies, scientific developments, and sustainable management to achieve economic success, ensure food security, and solve environmental problems. The application of innovative solutions such as modern tillage methods, efficient fertilisers, and hybrid technologies allows the agricultural sector to remain competitive and sustainable in the changing conditions of the modern world (Roberts, 2021). Growing plant-based food products today also requires innovative strategies and modern approaches to agricultural activities. According to E. Shahini et al. (2023), the introduction of agrointelligence and modern irrigation technologies has contributed to a 15% increase in crop yields and a 20% reduction in irrigation water consumption, and modern genetically modified varieties have shown high resistance to stressful conditions, which has contributed to improving the quality of grown products. Due to these innovations, the agricultural sector of Ukraine can ensure sustainable food production, meeting the requirements of economic sustainability, environmental safety, and improved product quality. The transition to modern technologies using engineering will contribute to the further development of the agricultural sector and the introduction of sustainable agricultural production (Atanasov, 2023).

The purpose of the study was an in-depth analysis of the current state of plant food cultivation in Ukraine, identifying key challenges and opportunities, and ways to optimise production to achieve a sustainable, cost-effective, and competitive agricultural sector. To achieve the stated goal, the following tasks were set: to analyse the current state of growing plant food products and present strategies aimed at increasing sustainability and stimulating development in the field of agricultural production in Ukraine.

#### MATERIALS AND METHODS

The theoretical segment of the study includes the papers by researchers in the field of agricultural development and in the field of research on the problems of transformations in agricultural production and its sale. In addition, the sustainable development goals and statistical data of the State Statistics Service of Ukraine were used as an information component of the study. The research materials were analysed using the methods of comparison and grouping, and the abstract and logical method was aimed at investigating the current state, problems, and prospects of growing plant-based food products in Ukraine.

In the course of the research, a complex of special and general scientific methods was used: generalisation – when working with literary sources for systematisation and generalisation of information; dialectical method – to investigate the regularities of the state and prospects of growing plant-based food products; grouping – to explore the totality of data and their logical combination; analysis – to analyse the collected information, draw conclusions and provide recommendations; statistical analysis – for quantitative

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expression of data; synthesis – to combine the obtained data into a concise and scientific description; scientific abstraction – to determine the essence of the model of development of the agricultural sector; comparative analysis – to contrast the results obtained and identify differences or similarities.

The paper also included a SWOT analysis, which helped to identify the strengths and weaknesses of the agricultural sector, and analyse opportunities and threats for developing strategies aimed at improving the sustainability and development of Ukrainian agricultural production. To effectively conduct a study on the cultivation of plant-based food products in the current conditions of the Ukrainian agricultural sector, the statistical data on production volumes, yields, and harvested areas of crops by their types were considered. In addition, the following indicators were analysed to determine the state and prospects of growing plant food products: the dynamics of gross harvest and yield, and the sown areas of the following crops: cereals and legumes, sugar beet, sunflower, soybeans, rapeseed, potatoes, and open-ground vegetable crops. Ultimately, the production of the main agricultural crops, the share of value added of the agricultural sector to the GDP of Ukraine, the cost of agricultural exports from Ukraine to the European Union for the period 2015-2022, and the volume and average prices of agricultural products sold by agricultural enterprises in January 2022 were considered.

The results obtained were processed for reliability using the MANOVA multivariate analysis of variance using Microsoft Excel and Statistica 10 software suites. Differences in the results obtained are possible at a significance level of P $\leq$ 0.05 according to the Student's t-test.

## RESULTS

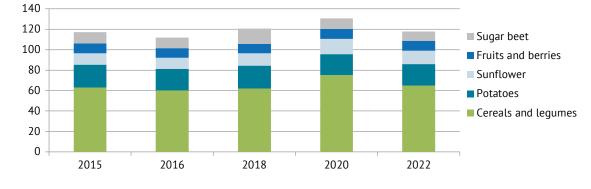
A detailed analysis of the production of the main agricultural crops in Ukraine showed some growth in 2018-2020, but in 2021-2022 there was a significant decline and the dynamics of instability (Leal Filho *et al.*, 2023). In particular, the acreage of crops such as sugar beet and potatoes decreased, while the acreage of sunflower, rapeseed, and soybeans increased. The decrease in acreage may be conditioned by economic factors, losses from natural disasters, and external factors such as war. Along with this, there is a clear increase in the yield of almost all types of crops, which may indicate the introduction of more efficient technologies and modern methods of cultivation (Table 1).

**Table 1.** Dynamics of gross harvest, yield, and acreage of major agricultural crops in Ukraine

Years	Grain and leguminous crops	Industrial sugar beet	Sunflower	Soybeans	Rapeseed	Potatoes	Open ground vegetable crops
Gross harvest of basic agricultural crops, thous. hwt							
2015	601,250	103,300	111,810	39,310	17,380	208,390	92,140
2016	660,880	140,110	136,270	42,770	11,540	217,500	94,150
2017	619,160	148,810	122,350	38,904.4	21,945.7	222,080	92,860
2018	700,565	139,677	141,651.7	44,608	27,506	225,039.7	88,845
2019	751,432	102,045.3	152,541.2	36,987.1	32,803.2	202,691.9	91,901.7
2020	633,445.4	82,565.2	131,358	27,709.3	25,863.5	208,586.8	91,137.3
2021	566,967.6	83,989.5	122,108.6	23,623.4	26,300.5	208,688.2	81,254.9
2022	538,637.1	99,414.6	113,287.4	34,438	32,502.7	208,992.1	86,452.1
Yield of the main agricultural crops, hwt/ha							
2015	41.1	436	21.6	18.4	25.9	161	206
2016	46.1	482	22.4	23	25.7	166	211
2017	42.3	465.5	20.1	19.7	27.9	167.8	197.9
2018	47.4	508.5	23	25.8	26.5	170.5	204.7
2019	49.1	461.1	25.6	22.9	25.6	154.8	205.9
2020	42.9	409.5	20.6	20.9	23.4	157.4	199.9
2021	39.7	362.4	20	19.8	23.9	165.1	192.6
2022	45.8	541.2	21.6	22.6	28.7	173.5	195.2
Acreage of the main agricultural crops, thous. ha.							
2015	14,739	237	5,105	2,158	682	1,291	440
2016	14,401	292	6,073	1,869	455	1,312	442
2017	14,607	318	5,943	1,994	789	1,324	440
2018	14,848	279	6,058	1,709	1,042	1,319	433
2019	15,318	221	5,928	1,609	1,282	1,309	445.8
2020	14,759.1	201.6	6,381.3	1,323.2	1,104.9	1,325.4	455.8
2021	10,203.2	193.8	6,110.5	1,183.4	1,112.8	1,263.9	421.9
2022	12,171.1	184.1	5,292.8	1,558.9	1,161.1	1,207.7	439.2

*Source:* State Statistics Service of Ukraine (Areas, gross harvests..., 2023)

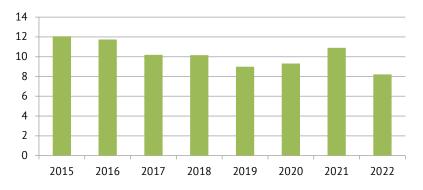
Monitoring and analysis of data on the dynamics of the development of the agricultural sector and the development of strategies to improve the sustainability and efficiency of agricultural production showed that the production of fruits and berries in Ukraine remained at a stable level of about 9.8-10.0 million tonnes during the period from 2015 to 2022. Despite small fluctuations, this stability may indicate a certain conservatism in the cultivation of fruits and berries in Ukraine, or it may be due to difficulties in market access or other economic factors. The production of sunflower and potatoes also remains at a high level, which cannot be noted about the production of sugar beet, which remains at a fairly low level during all the years studied (Fig. 1).



*Figure 1.* Production of the main agricultural crops in Ukraine, mln. t. *Source:* State Statistics Service of Ukraine (Volume of production..., 2023)

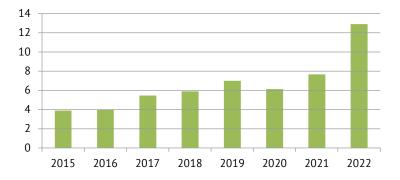
The production of the main agricultural crops in Ukraine is influenced by various trends and factors that can be decisive for the agricultural sector. In particular, agroclimatic conditions can affect crop yields and production. Extreme weather events, such as droughts or floods, can lead to crop losses and reduced production. Economic instability can affect the financial capacity of agricultural enterprises. Changes in the amount of available financial resources can affect the choice of technologies, production volumes, and business efficiency. Changes in consumer demand for specific agricultural products can affect production and acreage. Adaptation to changes in consumer demand may require a reorientation of agricultural production. In addition, the loss of control over agricultural land due to war can significantly affect the volume of production and acreage. Economic turbulence and

significant mass migration of the population can lead to significant changes in agriculture. In particular, the displacement of the population, including agricultural workers due to war, can affect the availability of labour and production efficiency. To overcome these challenges and ensure the sustainability of the agricultural sector, it is important to develop strategies to adapt to changes, improve cultivation methods, develop modern technologies, and promote sustainable agricultural development. Figure 2 shows that the share of value added of the agricultural sector to gross domestic product in Ukraine was marked by a sharp increase in 2021. This indicated positive trends in agriculture and its significant contribution to the economy. However, a sharp decrease in this share in 2022 is the result of the influence of various factors, in particular, the war.



*Figure 2.* Share of value added of the agricultural sector to GDP in Ukraine, % *Source:* State Statistics Service of Ukraine (National accounts (GDP), 2023)

However, despite the existing instability in gross production volumes, in general, the analysed data indicate a stable increase in the value of agricultural exports from Ukraine to the European Union during the study period, with intensive growth in 2022. Such dynamic growth may indicate a positive impact of the Ukrainian agricultural sector on the international market (Fig. 3). The dynamics of agricultural exports to the European Union indicates a steady demand for Ukrainian agricultural products in the region. The intensity of export value growth in 2022 can be the result of successful implementation of international marketing strategies, improving product quality and maintaining trade relations with partners in the European Union. This underscores the importance of Ukraine's agricultural sector as a key player in the international agricultural arena, capable of ensuring stability and growth in the face of global challenges.



*Figure 3.* Value of agricultural exports from Ukraine to the European Union, billion USD *Source:* State Statistics Service of Ukraine (Commodity structure of..., 2022)

In addition, a detailed analysis of sales volumes shows that the volume and average prices of agricultural products sold by agricultural enterprises in January 2022 increased by 75.9%, which may indicate a positive development of the agricultural sector. Total sales of oilseeds increased by 50.6%, while average prices remained high. Potato sales increased by 63.1%, but average prices declined. Sales of vegetables decreased by 6.4%, but average prices increased significantly. Sales of white crystalline sugar decreased by 13.8%, but average prices also increased. In general, sales volumes of most product categories have increased, which indicates a positive development of agriculture. However, it is important to note that product prices have also increased, which may affect inflation and consumer prices (Table 2).

		Implemented	Average sales prices		
Product name	Thous. t. In % compared to the corresponding period in 2020		UAH per tonne In % compared to the corresponding period in 2		
Grain and leguminous crops	3,662.2	175.9	6,675.6	108.5	
Of them					
Wheat	621.9	150.7	7,686.1	108.6	
Grain corn	2,908.1	181.7	6,438.1	109.3	
Barley	88.3	234.4	6,907.1	114.6	
Rye	14.7	272.4	5,176	107.5	
Oilseed seeds	826.8	150.6	17,691.4	105.9	
		Of them			
Soybeans	104	122.9	16,045.6	111.9	
Rapeseed	3.7	285.4	20,834.4	167.6	
Sunflower seeds	7,174	155.3	17,904.8	104.4	
Potatoes	22	163.1	5,248	84.2	
Vegetable crops	16.4	93.6	15,486.1	154	
Fruit and berry crops	13.8	145	7,584.1	78.3	
White crystalline beet sugar	43.3	86.2	18,057.3	115.3	

Table 2. Volumes and average prices of agricultural products sold by agricultural enterprises in January 2022

*Source:* State Statistics Service of Ukraine (Implementation of agricultural..., 2022)

According to many researchers, modern technologies have recently been actively used in agriculture in Ukraine, including digital innovations, genetic engineering, and agroecological approaches. Digital innovation drives the use of monitoring and management systems such as sensors, GPS technologies, and data acquisition systems to improve production processes and optimise resource management. The Internet of Things (IoT) is also widely used to collect and process information about the state of crops, climatic conditions, humidity levels, etc. (Leschuk et al., 2022). In the field of genetic engineering, research and implementation of genetically modified organisms (GMOs) is carried out to create plants with improved properties, such as resistance to pests, diseases and creating favourable conditions for harvesting. Agroecological approaches include expanding the area of organic farms and using environmentally friendly methods of tillage. Sustainable use of soils is also important to reduce the impact of agricultural processes on the soil and its fertility (Glauben et al., 2022; Rawtani et al., 2022). A SWOT analysis of Ukraine's agricultural sector was carried out to provide a more detailed understanding of the sector, reflecting the internal and external factors that affect its state and prospects. It is important to note that among the strengths stand out a significant volume of production, favourable geographical location and potential for innovative development. However, weaknesses such as outdated equipment and technology, high costs, and insufficient infrastructure can limit the industry's ability to reach its maximum potential. New opportunities arise from increased global demand for organic and eco-friendly products, opportunities to become a key player in the global market, and increased investment in agriculture and infrastructure. However, threats such as poor management efficiency, innovation complexity, and workforce challenges require careful management and strategic planning to ensure the sustainability and development of the industry in a global market environment (Table 3).

<b>Table 3.</b> SWOT-analysis of the agricultural sector	r of	f Ukraine
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	Internal factors	External factors
Strengths	<ol> <li>Significant production volume.</li> <li>Geographical location.</li> <li>Potential for innovative development.</li> </ol>	<ol> <li>Increasing global demand for organic and eco- friendly products.</li> <li>Reducing the cost of products on international markets.</li> </ol>
Weaknesses	<ol> <li>Outdated equipment and technologies.</li> <li>High costs for the production and operation of equipment.</li> <li>Insufficient infrastructure for storing and transporting products.</li> <li>Lack of innovative technologies.</li> </ol>	<ol> <li>Lack of competitiveness in world markets.</li> <li>Changes in trade agreements and tariffs.</li> <li>Impact of geopolitical conflicts and wars on exports and market access.</li> </ol>
Opportunities	<ol> <li>Significant production volume.</li> <li>Potential for innovative development and improvement of product quality and increased competitiveness.</li> <li>Development of new sales markets.</li> </ol>	<ol> <li>Increasing global demand for organic and eco- friendly products.</li> <li>Ukraine can become a key player in the agricultural market.</li> <li>Increase investment in agriculture and infrastructure.</li> </ol>
Threats	<ol> <li>Low efficiency of production and business process management.</li> <li>Failure to implement innovation through a conservative approach.</li> <li>Insufficient qualification of personnel and problems with the labour force.</li> </ol>	<ol> <li>Negative impact of changes in trade agreements and tariffs.</li> <li>Increased competition in global markets.</li> <li>Impact of sanctions and trade restrictions.</li> </ol>

Source: developed by the author

Based on the conducted research, a number of strategic areas for improving the sustainability and development of Ukrainian agricultural production have been identified. The first strategic area is the introduction of modern technologies, such as the latest agricultural technologies, to improve production efficiency and the use of automation and monitoring systems to optimise processes. The second area involves stimulating innovation in agriculture, including financial support and incentives for research and innovation. It is also important to create incubators and innovation centres to promote start-ups in the rural sector. The third area is the education and development of personnel, including improving the level of education of rural workers and farmers, and the introduction of training and training programmes for the effective use of modern technologies. The fourth strategic area is the sustainable use of natural resources. This includes the introduction of environmentally friendly methods of cultivation and production, and the rational use of water resources and reducing the impact on soils. The fifth area provides for the diversification of production, including the expansion of the range of agricultural products for different markets and the development of agrotourism and other

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alternative areas for additional income. The sixth area is sectoral cooperation, which provides for cooperation between agricultural enterprises and farmers' associations for joint development and resource conservation. The seventh area is the development of export opportunities, including expanding export markets and increasing the volume of agricultural exports, and active participation in international exhibitions and fairs to promote Ukrainian goods. These strategies are aimed at ensuring the sustainability and competitiveness of plant-based food products in the Ukrainian agricultural sector. Growing plant-based food products in Ukraine has growth prospects based on the use of the latest technologies, increasing the quality and competitiveness of products, and active participation in the global agricultural market. These strategies are aimed at ensuring the sustainability and competitiveness of plantbased food products in the Ukrainian agricultural sector.

Thus, the prospects for the growth of plant-based food products in Ukraine are based on the use of advanced technologies that help increase productivity and ensure high product quality. The introduction of the latest agricultural technologies, such as modern methods of tillage, efficient irrigation systems and the use of high-quality fertilisers, contributes to increasing yields and unifying products. Improving product quality includes not only the use of modern agrotechnical methods, but also compliance with high standards of product safety and quality. The introduction of quality control systems, including monitoring of production processes and implementation of certification standards, promotes the cultivation of products that meet the requirements of both domestic and international markets. Active participation in the global agricultural market opens up new opportunities for selling Ukrainian products. The expansion of export markets and participation in international exhibitions and fairs help promote and position Ukrainian agricultural products, ensuring their competitiveness at the global level. Thus, the development of the Ukrainian agricultural sector is based on a combination of modern technologies, high quality standards, and active participation in the global economic dimension. This creates favourable prospects for sustainable growth and competitiveness of Ukrainian products, and active participation of the country in the global agricultural market.

#### DISCUSSION

Favourable natural and climatic conditions, a large land area and agricultural traditions create the potential for efficient cultivation of various crops in Ukraine. However, I. Irtyshcheva *et al.* (2023) argue that the conditions of 2024 set farmers not only the task of

increasing production, but also high requirements for the sustainability and environmental safety of growing products. Ukrainian crop production plays a strategic role in ensuring food security, export potential, and sustainable development of the country, which is also correlated with the study. Y. Danko et al. (2020), N. Leschuk et al. (2022) and K. Deininger et al. (2023) emphasise that given the importance of plant production in the agricultural sector, it is important not only to increase the volume of cultivation, but also to ensure manoeuvrability and adaptability to modern consumer requirements and environmental standards, because the combination of productivity, quality, and sustainability is the key to the successful development of Ukrainian food production. Therefore, the benefits of increasing the number of farms switching to organic farming were noted. It is this approach that leads to an improvement in soil quality, a reduction in the negative impact on the environment, and an increase in consumer demand for organic products.

According to C. Van der Giesen et al. (2020), the expansion of areas for organic crops is becoming a key vector of development, as it not only meets global trends in ecological production, but also increases the competitiveness of Ukrainian agricultural products on the world market. An important step towards the sustainable development of the agricultural sector is also the use of renewable energy and green energy, which, coming from agricultural revenues, make a significant contribution to ensuring environmental sustainability. In addition, the state of Ukrainian agricultural production as of 2024 indicates a gradual increase in the production of plant products. In particular, farmers in Ukraine show a growing interest in the use of modern agricultural technologies, improving plant varieties and more efficient use of land resources. Genetic engineering opens up wide opportunities for growing plantbased food products that meet the challenges of our time. This contributes to improved yields, pest and disease resistance, and adaptation to climate change. The development of new varieties also allows for efficient use of resources, reduced environmental impact, and improved product quality (Pörtner et al., 2022).

The conducted research coincides with the opinion of L. Gutierrez *et al.* (2022), according to which the introduction of modern technologies, consideration of the principles of sustainable use of natural resources and diversification of production become crucial elements for achieving efficiency and sustainability. Innovation promotion, which is provided by financial support and the creation of innovation centres, defines a new stage in the development of the sector, where there is continuous improvement and introduction of advanced technologies. However, R. Ciaian *et al.* (2012) and M. Behnassi & M. El Haiba (2022) suggest that while the Ukrainian agricultural sector has significant potential for development, it also faces numerous challenges, such as outdated equipment and insufficient infrastructure. To overcome these obstacles, it is important to pay attention to the introduction of modern technologies, stimulating innovation, improving education and actively developing export opportunities. These measures can become a catalyst for the sustainable development of the Ukrainian agricultural sector, providing it with the necessary tools to overcome modern challenges and achieve full potential.

I. Salim et al. (2019) suggest that an important aspect of the development prospects is also consideration of socio-economic factors, such as the war, which significantly affected the agricultural sector due to loss of control over land resources, economic instability, and mass migration of the population. However, despite these difficulties, the increase in the value of agricultural exports to the European Union is a positive signal and indicates the successful adaptation of the Ukrainian agricultural sector to international market conditions, which is also confirmed in the study. Another confirmation of the conducted research can be found in the papers by D. Fiott (2022) and J. Eustachio et al. (2023), according to which performance management, strategic planning, and cooperation between business entities remain key factors for overcoming challenges and creating opportunities for the development of the agricultural sector. Sustainable use of natural resources, diversification of production, sectoral cooperation, and active development of export opportunities create a solid foundation for sustainable and competitive development of the Ukrainian agricultural sector in a global market environment.

Thus, summing up the above, it can be argued that in the conditions of active development and transformation of the Ukrainian agricultural sector, it is impossible to underestimate its significant role as a key component of the national economy. This sector not only ensures the stability of the economic situation in the country, but also has a huge potential to influence global economic and environmental challenges, and certain strategic areas have the potential to significantly improve the state and prospects of the Ukrainian agricultural sector. These strategies, focused on sustainability and coordinated growth, interact with each other and develop the basis for sustainable and competitive development of the Ukrainian agricultural sector in the global economic environment. Strategies aimed at sustainability and economic growth have great potential to improve not only the state of the agricultural sector, but also to influence the overall development prospects of Ukraine. In a global economic environment, stability

and willingness to adapt are critical factors for successfully overcoming challenges and taking advantage of opportunities at the international level.

#### CONCLUSIONS

Ukraine's agricultural sector is an important component of the national economy, determining the quality and stability of the food supply. Despite favourable natural and climatic conditions and a large land area, Ukraine's agricultural sector faces numerous challenges, such as war, economic instability, and loss of control over land resources. In the course of the study, it was found that sales volumes in agriculture increased by 75.9%, indicating a positive development of the industry, but this is accompanied by an increase in prices for products, which can cause inflationary pressure. The instability of the agricultural sector confirms a sharp increase in the share of value added in 2021 and a decline in 2022, but the positive aspect is a significant increase in yields and export values, indicating the successful impact of the Ukrainian agricultural sector on the international market. These changes pose challenges to domestic economic sustainability, but also point to potential opportunities for the development of the external agricultural sector. Measures aimed at introducing modern technologies, stimulating innovation, improving the level of education and developing export opportunities can contribute to the sustainable development of the agricultural sector. It is important to emphasise the need to address the problems of outdated equipment and insufficient infrastructure. Sustainability, adaptability, and reasonable use of resources are becoming key priorities for the Ukrainian agricultural sector in the face of global challenges and transformations. The integration of modern strategies aimed at sustainability and coordinated growth is an important step in achieving sustainable development and competitiveness of the Ukrainian agricultural sector. Thus, the agricultural sector of Ukraine has experienced significant challenges due to war and economic difficulties, but continues to show some potential for the development of agricultural products and impact on world markets, and understanding the positive and negative aspects allows developing more effective action plans for creating a competitive agricultural sector. Prospects for further study are to investigate the impact of war on agriculture and develop a clear strategy for adapting to economic instability.

# ACKNOWLEDGEMENTS

None.

# **CONFLICT OF INTEREST**

None.

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# Стан та перспективи вирощування рослинної харчової продукції в сучасних умовах українського аграрного сектору

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Анотація. Аграрний сектор в Україні відіграє ключову роль у національній економіці, надаючи якісне та стабільне харчове забезпечення для населення. Проте, навіть при сприятливих природно-кліматичних умовах та обширній земельній площі, галузь стикається з численними викликами, такими як війна, економічна нестабільність та втрата контролю над земельними ресурсами. Мета дослідження – провести аналіз поточного стану вирощування рослинної харчової продукції в Україні задля виявлення ключових викликів і можливостей. Для досягнення поставленої мети проаналізовано валовий збір, урожайність та посівні площі основних сільськогосподарських культур, частку доданої вартості аграрного сектору до валового внутрішнього продукту в Україні, вартість експорту сільськогосподарської продукції до Європейського Союзу за період 2015-2022 рр. Результати проведеного дослідження свідчать, що обсяги реалізації в сільському господарстві зросли на 75,9 %, вказуючи на позитивний розвиток галузі. Однак цей позитивний розвиток супроводжується зростанням цін на продукцію, що може призвести до інфляційного тиску. Нестабільність аграрного сектору підтверджується різким зростанням частки доданої вартості у 2021 році та спадом у 2022 році. Однак, важливим позитивним аспектом є значний приріст урожайності та вартості експорту, що свідчить про успішний вплив українського сільськогосподарського сектору на міжнародних ринках. У дослідження продемонстровано, що незважаючи на існуючі виклики, аграрний сектор продемонстрував гнучкість та адаптивність, особливо в контексті змін у посівних площах та обсягах виробництва сільськогосподарських культур. Заходи, спрямовані на впровадження сучасних технологій, стимулювання інновацій, підвищення рівня освіти та розвиток експортних можливостей, можуть стати каталізатором для сталого розвитку аграрного сектору. Отримані результати є необхідними для розроблення конкретних заходів та стратегій, спрямованих на покращення ситуації в аграрному секторі України та забезпечення його сталого розвитку

**Ключові слова:** валовий збір; додана вартість; конкурентоспроможність; експорт; сільськогосподарське виробництво