Ukraine's Agricultural and Rural Development: Transformation of Strategic Planning within the Processes of European Integration

Submitted 17/01/25, 1st revision 01/02/25, 2nd revision 18/02/25, accepted 17/03/25

Andrii Kovalenko¹, Julia Tsybulska², Oksana Sakal³, Vitaliy Krupin⁴, Mariia Bratinova⁵

Abstract:

Purpose: The purpose of the paper is to understand the conditions and problems within the development of Ukraine's agricultural sector, qualitative transformations, and peculiarities of strategic planning of this sector and rural areas in the context of Ukraine's European integration, wartime challenges, and post-war recovery.

Design/Methodology/Approach: The study utilizes a retrospective analysis of Ukrainian legislation and strategic planning documents for agricultural sector. Through legal and hermeneutic analysis, the research examines the evolution of state policy, which initially focused on pure agricultural development before expanding to encompass the broader agrifood sector and rural development. Data sources include official statistics and reports from the Cabinet of Ministers of Ukraine, the Ministry of Agrarian Policy and Food of Ukraine, and the State Statistics Service of Ukraine. These resources provide insights into the structural changes and resource allocation in the sector. Additionally, the paper employs a systematic and comparative approach to assess the challenges and prospects of Ukraine's European integration in agriculture and rural development. This involves analyzing the principles and regulations of the European Union's Common Agricultural Policy (CAP) and its potential alignment with Ukraine's national policy frameworks, focusing on adapting EU standards and directives to Ukraine's agricultural context.

¹Department of Sustainability Development Methodology, Institute for Demography and Life Quality Problems, National Academy of Sciences of Ukraine,nUkraine. https://orcid.org/0000-0002-8447-884X.

²Department of European Integration, Institute of Rural and Agricultural Development, Polish Academy of Sciences, Warsaw, Poland. https://orcid.org/0000-0001-8038-8233. Corresponding author: tsybulska.yulia@gmail.com;

³Department of Experimental Land Use Planning "Innovation Center", National Academy of Agrarian Sciences of Ukraine, Ukraine. https://orcid.org/0000-0001-8803-1298

⁴Department of Economic Modelling, Institute of Rural and Agricultural Development, Polish Academy of Sciences, Warsaw, Poland. https://orcid.org/0000-0002-7388-6813.

⁵Department of Experimental Land Use Planning "Innovation Center", National Academy of Agrarian Sciences of Ukraine, Ukraine. Faculty of Land Management of National University of Life and Environmental Sciences of Ukraine, Kyiv, 03022, Ukraine. https://orcid.org/0000-0002-2190-4274.

Findings: The analysis reveals that, despite Ukrainian agribusiness holding a significant position in global food markets, the development of Ukraine's agro-industrial complex and rural areas lags behind many countries. This lag is evident in low production competitiveness, outdated technologies, limited investment, and a high dependence on state funding. Additionally, rural development faces specific challenges, including declining human capital, governance limitations, and underutilized community resources. Positive progress has been noted in achieving Sustainable Development Goals (SDGs), as the study highlights increased consumption of key food items - such as meat, fish, vegetables, and fruits - among the population. This shift suggests a gradual transition toward a healthier diet, aligning with broader health and nutritional goals. In terms of European integration, the findings suggest that Ukraine's alignment with the EU's updated Common Agricultural Policy could strengthen its European integration efforts. By adopting EU standards, Ukraine may enhance the agricultural sector's efficiency, support sustainable rural development, and foster long-term resilience in the post-war period. This alignment is expected to facilitate the sector's recovery and contribute to achieving food security by incorporating EU practices in sustainable land use, biodiversity, and rural socio-economic stability.

Practical Implications: The paper provides insights for policymakers to address the sector's development in the context of European integration, facilitating post-war recovery and contributing to food security. The implementation of European standards could improve agricultural practices and rural development in Ukraine.

Originality/Value: This study examines the agricultural sector's strategic planning amidst the challenges posed by war and integration into European frameworks, contributing to discussions on sustainable rural development and sectoral alignment with European policies.

Keywords: Sustainable Development Goals, strategic planning documents, state policy, Ukraine, EU, Common Agricultural Policy, rural development, land valuation.

JEL codes: Q01, Q18, Q56.

Paper type: Research article.

Acknowledgement: Significant parts of this research were conducted within the project "Substantiation and measures for implementation of a human rights-based integrated approach to rural development, food security and land policy in post-war rebuilding of Ukraine" (acronym "rUAr: Rebuild Rural Ukraine"), financed under the "Long-term program of support of the Ukrainian research teams at the Polish Academy of Sciences carried out in collaboration with the U.S. National Academy of Sciences with the financial support of external partners".

1. Introduction

In the early 1990s, Ukraine made fundamental changes to its agricultural policy, focusing on a transition to diverse forms of ownership, use, and disposal of property, as well as creating equal economic conditions for all businesses. Unlike the previous emphasis on increasing capital investments, the new strategy aimed to improve the efficiency of resource use, enhance labour and land returns, and better utilize

organizational and human resources. The goal was to increase the intensity and efficiency of the agro-industrial complex, reform management structures, and restructure pricing and the financial and credit system (Onishchenko *et al.*, 1990).

Ukraine's journey toward agricultural modernisation is closely linked to its aspirations for European integration. The signing of the Association Agreement with the European Union marked a significant milestone in aligning Ukraine's agricultural policies with EU standards. This agreement not only opened new markets for Ukrainian agricultural exports but also set a framework for adopting sustainable agricultural practices and improving rural livelihoods.

However, the ongoing war has posed unprecedented challenges, disrupting production, damaging critical infrastructure, and exacerbating the sector's existing vulnerabilities. The war has also highlighted the urgent need for comprehensive strategies to rebuild and modernise Ukraine's agricultural sector, with a focus on enhancing resilience, sustainability, and self-sufficiency.

At that time, there were no strategic planning documents at the state level on the development of the agricultural sector. However, a specially adopted law declared the priority of social development of rural areas and the agro-industrial complex, which objectively follows from the exceptional importance and indispensability of agricultural products in the life of man and society.

It was noted that a high level of socio-economic development of rural areas is the main condition for food and raw material supply of the republic, its economic independence, and the provisions of this law are mandatory in the development and adoption of other legislative and regulatory acts (Verkhovna Rada of Ukraine, 1990).

Furthermore, alongside the establishment of state institutions and the development of Ukraine's own policies across all spheres of public life, significant institutional and sectoral reforms have also touched upon the agricultural sector. The challenging path of transformations has integrally combined Ukraine's natural-resource, material-technical, and social potential with domestic and global scientific and managerial experience, embodying European and international standards and policies in agri-food and rural development.

Strategic planning remains crucial for addressing these challenges and leveraging Ukraine's agricultural potential. The focus has shifted towards not only increasing output but also ensuring that agricultural practices are sustainable and aligned with the Sustainable Development Goals (SDGs). This includes promoting energy efficiency, enhancing food security, and improving rural living standards. As Ukraine moves forward with its European integration agenda, it is imperative to establish robust frameworks for agricultural policy, rural development, and environmental protection.

The aim of this research is to provide an in-depth analysis of the development trajectory of Ukraine's agricultural sector, to identify key problems, and to assess the potential for European integration to address these issues. Specific objectives include analysing the retrospective development of Ukraine's agricultural policies, examining the strategic planning approaches in place, and evaluating the challenges and opportunities arising from CAP alignment.

A novelty of this research is its focus on strategic planning in the context of both wartime challenges and post-war reconstruction, a subject scarcely covered in prior studies on Ukraine's agricultural sector. The research's topicality is reinforced by Ukraine's recent EU candidate status, which brings an urgent need to align national agricultural policies with EU standards. The study further raises critical questions about policy adaptation, rural revitalisation, and sustainable development amid warinduced setbacks and in preparation for future EU membership.

2. Research Methodology

The study employs a combination of retrospective, legal, and comparative analyses to assess the development trajectory of Ukraine's agricultural sector and its alignment with European standards. This mixed-method approach enables a nuanced understanding of the sector's historical evolution, current challenges, and integration prospects.

A retrospective analysis was conducted on legislative and policy documents to trace the changes in Ukraine's agricultural policies since the early 1990s. This method allows the researchers to evaluate how national agricultural priorities have shifted from sector-specific growth to comprehensive rural and agri-food development, with particular attention to European integration processes.

Key sources include presidential decrees, national legislation, and strategic documents from the Cabinet of Ministers and Ministry of Agrarian Policy and Food of Ukraine. These primary sources provide valuable insights into the policy directions and regulatory adjustments that have shaped the sector's progress.

The legal analysis approach, as used by scholars like Haidutskyi (2020) and Zinchuk (2019), allows the study to examine Ukraine's compliance with the European Union's Common Agricultural Policy (CAP) standards. By analysing regulatory frameworks, the research identifies gaps in Ukraine's legislation that need to be addressed to facilitate integration with EU norms. Additionally, the study reviews EU regulations and CAP principles to highlight areas where Ukrainian policies already align with or diverge from European standards.

Comparative analysis was employed to contrast Ukraine's agricultural policies and development strategies with those of EU member states. Drawing on Zinchuk's (2019) findings regarding the CAP, this approach allows for an assessment of the

practical benefits and potential challenges Ukraine might face in adopting CAP frameworks. Comparative metrics, such as agricultural productivity, rural development indicators, and food safety standards, were reviewed to assess Ukraine's positioning relative to EU countries.

Information from government reports, national statistics, and EU policy documents was also incorporated to enhance the accuracy and relevance of the findings. This multi-source approach ensures that the research captures a comprehensive picture of Ukraine's agricultural landscape within the European integration context. The study employs a comprehensive methodological approach, that addresses both the historical and policy-oriented aspects of the study, aligning with prior studies but focusing specifically on strategic planning amidst wartime challenges and European integration requirements.

3. Research Results and Discussion

3.1 Agricultural Sector of Ukraine and its Impact on the Achievement of Sustainable Goals

Ukraine has significant opportunities to develop its agricultural sector and transform it into a highly efficient, export-oriented sector of the national economy capable of ensuring the country's food security. Ukraine has almost a third of the black soil reserves and 27% of the arable land in Europe. As of 01.01.2020, agricultural land amounted to 41,310.9 thou hectares (or 68.5% of the land area of Ukraine), of which arable land was 32,757.3 thou hectares (State Statistics Service of Ukraine, 2022).

According to the Ministry of Agrarian Policy and Food of Ukraine, more than 73,000 business entities, including 49,500 agricultural enterprises, are engaged in agricultural production in the agricultural sector of the economy. The number of statistically active farms is 30,242, of which 26,629 farms cultivate 4.9 million hectares of agricultural land.

Together, farms and private households produce more than 44% of gross agricultural output (Ministry of Agrarian Policy and Food of Ukraine, 2024). As for the technical equipment of agricultural producers, in particular, the number of tractors in agricultural enterprises in 2019 was 130 thousand units (against 319 thousand units in 2000 and 151 thousand units in 2010), and in households in 2021 - 199 thousand units (against 101 thousand units in 2000 and 172 thousand units in 2010) (Table 1).

The volume of agricultural production in 2022 decreased sharply compared to 2021 (from USD 22,033.6 million to UAH 19,580.5 million, or by 25%); 78.2% of the total volume was crop production and only 21.8% was livestock production; 65.2% of the total volume of agricultural production was produced by agricultural enterprises and 34.8% by households (State Statistics Service of Ukraine, 2022).

Table 1. Basic indicators of agricultural enterprises activity in Ukraine

Indicator	2000	2005	2010	2015	2020
Number of employees, thsd.	2,475.0	1,038.0	645.2	500.9	449.8
persons					
Tractors, thsd. pcs	318.9	216.9	151.3	127.9	130.5
Yield of agricultural crops, centners	18.3	25.9	27.6	43.8	46.4
per hectare of the harvested area					
Annual average milk yield per cow,	1,588	2,952	3,975	5,352	6,634
kg					
Inorganic fertilisers (in active	281.9	560.5	1,064.2	1,415.0	2,488.7
substance) used of under the harvest					
reporting year, thsd. t					
Organic fertilisers used of under the	28,964.1	13,387.3	9,963.6	9,662.7	10,222.9
harvest reporting year, thsd. t					
Cattle, thsd. heads	9,423.7	6,514.1	4,494.4	3,750.3	2,874.0
Pigs, thsd. heads	7,652.3	7,052.8	7,960.4	7,079.0	5,876.2
Sheep and goats, thsd. heads	1,875.0	1,629.5	1,731.7	1,325.3	1,140.4
Poultry, thsd. heads	123,722	161,994	203,840	203,986	200,652
Profitability of all types of	-1.0	6.8	17.5	30.4	14.0
agricultural activities, %					

Source: State Statistics Service of Ukraine (2022).

The Ministry of Agrarian Policy and Food of Ukraine is a primary entity responsible for agricultural and rural development. Changes in the emphasis of the Ukrainian state's agricultural policy can be traced to a certain extent in the name of this central executive body. In the early 1990s, it retained the previous name of the Ministry of Agriculture and Food of Ukraine, and in the mid-1990s it was called the Ministry of Agricultural Complex of Ukraine.

Later, with the change in the sectoral nature of state policy to a functional one, it was called the Ministry of Agrarian Policy of Ukraine (since 1999), the Ministry of Agrarian Policy and Food of Ukraine (since 2010), the Ministry of Agrarian Policy of Ukraine again, and finally, after a short period of liquidation - Ministry of Agrarian Policy and Food of Ukraine (since the end of 2020).

The strategic planning of Ukraine's agricultural sector has undergone significant transformations since the early 1990s. The agrarian reform was initiated by the Presidential Decree "On Urgent Measures to Accelerate Land Reform in the Field of Agricultural Production" of 10.11.1994, which defined several fundamental aspects: land denationalisation and privatisation; monetary valuation of agricultural land; division of land transferred to collective ownership with the issuance of certificates and state acts to farmers; formation and development of the land market; and organisation of state control in the field of land relations.

Economic reforms in Ukraine's agricultural sector gained momentum with the Presidential Decree of 03.12.1999, which initiated the transition of collective farms

into private entities. These farms possessed substantial assets, including land, buildings, and equipment, which were crucial to preserve (Haidutskyi, 2015). The privatisation strategy involved transforming collective farms into collective agricultural enterprises (CAEs), with land ownership transferred to these entities (Haidutskyi, 2020).

Key reform directions in the mid-1990s and early 2000s included:

- land reform (parceling, valuation, leasing),
- economic reform (conversion of CAEs into private structures),
- product market reform (removal of state orders, exchange trading, infrastructure development),
- state support reforms (fixed taxes, preferential loans, targeted subsidies, equipment leasing),
- rural social development.

These reforms initially boosted economic activity and investment in the agroindustrial sector. However, persistent challenges remained, such as inefficiencies in production, skewed focus towards household farming, outdated assets, and insufficient investment mechanisms, along with unaddressed social development in rural areas.

To address these problems and to define the basis of state policy in the budget, credit, pricing, regulatory and other areas of public administration to stimulate agricultural production and development of the agricultural market, as well as to ensure food security, the Law "On State Support of Agriculture of Ukraine" was adopted in 2004, and in 2007 the Cabinet of Ministers of Ukraine approved the State Target Programme for the Development of Ukrainian Rural Areas for the period up to 2015.

Since Ukraine joined the World Trade Organisation in May 2008, its agricultural sector has operated in a new economic environment, feeling the effects of the global financial crisis and market volatility in prices for resources and food. Over the years, Ukraine has strengthened its position in global food markets, becoming a leading exporter of barley, corn, wheat, sunflower seeds, and sunflower oil.

However, agricultural potential has been used inefficiently - Ukraine is lagging behind global and EU leaders in development. Key challenges include low product competitiveness, non-compliance with international standards, insufficient investment, and a dependence on state funding, as well as outdated technologies and a lack of processing in exports. Additionally, soil fertility has drastically declined, and erosion has increased. This situation is primarily caused by the low investment attractiveness of the sector, driven by unpredictable administrative price regulations, export restrictions, ineffective state support, and the absence of an agricultural land

market (Committee on Economic Reforms under the President of Ukraine, 2010). To address these issues, Ukrainian government approved the Strategy for the Development of the Agricultural Sector for the period up to 2020 in 2013.

At the United Nations Summit on Sustainable Development in 2015, the Sustainable Development Goals (SDGs) were approved, which were later supported by the Decree of the President of Ukraine "On the Sustainable Development Goals of Ukraine for the period up to 2030" of 30.09.2019 No 722/2019 (President of Ukraine, 2019) and presents a vision of their achievement by Ukraine in a national report prepared with the participation of representatives of ministries, agencies and the National Academy of Sciences of Ukraine: The 17 global SDGs were adapted to the national specifics and the guidelines for sustainable development of Ukraine until 2030 were presented in the form of a national SDG system with relevant tasks and monitoring indicators (Ministry of Economic Development and Trade of Ukraine, 2017). However, the last national review of the SDGs in Ukraine was released in 2020 (Ministry of Economy of Ukraine, 2020).

In light of the national priorities and the focus on various sectors, specific SDGs have been highlighted for further attention. Given the subject matter of this paper—focusing on the agricultural sector—the primary emphasis is placed on SDGs: 2 'End hunger, develop agriculture', 11 'Sustainable cities and communities', and 15 'Protect and restore terrestrial ecosystems' (Table 2). These goals align with the sustainable development vision for Ukraine and underscore the importance of agriculture in national progress.

Table 2. Progress in achieving selected Sustainable Development Goals related to agriculture and rural areas of Ukraine

SDGs	Indicators	2015	2018	2019	2020
	Labour productivity in agriculture, thsd. U.S. dollars per employed person	8.68	10.89	-	10.00
	Index of agricultural products, %	95.2	108.1	101.1	102.0
2 ZERO HUNGER	Index of food production, %	88.6	98.5	103.9	103.0
(((Share of food industry products and processing of agricultural raw materials in exports, %	38.3	39.4	44.3	51.0
	Share of agricultural land under organic production in the total area of agricultural land in Ukraine*, %	1.0	0.72	-	1.10
11 SUSTAINABLE CITIES AND COMMUNITIES	Coverage of territorial	100	100	100	100

	T	1	1	1	1
	units of Ukraine (regions)				
with programs to provide affordable housing for					
	various categories of				
	citizens, %				
	Share of regions that have	88	100	100	100
	approved and are	(for 22	(for 25	(for 25	(for 25
	implementing regional	regions)	regions)	regions)	regions)
	development strategies	,	,		,
	developed with public				
	participation, %				
	Area of arable land	32,531.1	32,544.2	_	31,150.9
	(cropland), thsd. ha	32,331.1	32,311.2		31,130.5
	Share of arable land	53.9	53.9	_	51.6
	(cropland) in the total	33.7	33.7		31.0
	territory of the country, %				
	· · ·	410.55	200.1		500.0
15 LIFE ON LAND	Land area under organic	410.55	309.1	_	500.0
	production, thsd. ha				
	Area of agricultural land	7,848.3	7,820.8	-	8,389.3
— —	under extensive use				
	(hayfields, pastures), thsd.				
	ha				
	Share of agricultural land	13.0	13.0	-	13.9
	area under extensive use				
	(hayfields, pastures) in the				
	total territory of the				
	country, %				
			1		

Source: Ministry of Economy of Ukraine (2020).

The expert community has identified technical modernisation of agricultural production and the food industry, improvement of their energy efficiency and realisation of energy saving potential as a benchmark for achieving Goal 2: Ending Hunger and Developing Agriculture in Ukraine (Ministry of Economic Development and Trade of Ukraine, 2017).

As of 2020, the country has consistently produced sufficient food to meet domestic needs: domestic production meets the domestic market's demand for basic foodstuffs by 97-109%, which corresponds to optimistic level of food security recommended by the FAO, and allows for a strong base for agricultural exports (Ministry of Economy of Ukraine, 2020).

In the context of achieving this goal, positive changes in the structure of the population's consumption of basic food products have also been recorded. Thus, in 2020, compared to 2015, consumption of almost all staple foods increased: meat - to 53.8 kg per person per year from 50.9 kg (the target for 2020 is 61.0 kg), fish - to 12.4 kg from 8.6 kg, vegetables - to 164.0 kg from 160.8 kg, and fruit - to 56.5 kg from 50.9 kg (the target for 2020 is 65.0 kg). The only exception was milk

consumption, which decreased per person per year to 201.9 kg compared to 209.9 kg, against the background of a decline in milk production that has been ongoing since 2014 (Ministry of Economy of Ukraine, 2020; State Statistics Service of Ukraine, 2022).

With regard to Goal 11 "Sustainable Development of Cities and Communities", the State Strategy for Regional Development for 2021-2027, approved by the Government in 2020, which was adjusted in 2024 in line with the SDGs and the challenges of wartime and post-war recovery, is in place in the field of strategic planning for rural development in Ukraine.

Development strategies at the local level should be formed in compliance with the principles of openness, inclusiveness and scientific validity, using modern tools of foresight and master planning, as well as the simultaneous introduction of a system of indicators for further monitoring and public control in the implementation process.

Along with the agri-food sector, the second key component of strategic planning in agriculture is sustainable rural development. In 2015, the Cabinet of Ministers of Ukraine approved the Concept of Rural Development, outlining priorities and mechanisms for adapting the agricultural and rural sectors to the EU free trade area.

The Concept aims to diversify economic activities, increase rural incomes, improve living conditions, protect the environment, and preserve rural culture. It also seeks to empower local communities and align legislation with EU standards. The Concept's implementation, set for completion by 2025, focuses on shifting agricultural policy to support rural development and improve rural quality of life.

The government approved the Action Plan for 2025 to improve quality of life, protect natural resources, diversify the rural economy, enhance governance, and provide education and advisory support. These initiatives align with the State Strategy for Regional Development 2021-2027, which includes creating rural policy frameworks in line with EU integration, improving transport access, promoting ICT development, and supporting rural infrastructure. The plan also aims to ensure access to social services, especially in remote rural areas (Cabinet of Ministers of Ukraine, 2020).

Agricultural production and rural development in Ukraine face several challenges. While large businesses dominate agriculture, leading to monopolization, there has been a decline in rural entrepreneurial employment.

Although agroholdings boost productivity, foreign investment, and exports, they also bring negative effects, such as budgetary issues, job losses, reduced livestock, monoculture farming, and soil fertility depletion (Hadzalo and Zhuk, 2015).

Community-based rural development aims for sustainability, but agroholdings extract environmental rents and pollute rural areas without compensating for land degradation (Borodina et al., 2015). This is worsened by rural depopulation and depletion of local resources, driven by poorly planned community consolidation and inconsistent decentralization reforms (Hadzalo and Zhuk, 2015).

To address these problems, some researchers suggest a village-preserving model for rural development. This model involves organising village-based agricultural enterprises, registering them with local councils, promoting livestock farming, fostering cooperation with private farms, and ensuring that owners or managers reside on the farm (Hadzalo and Zhuk, 2015). The creation of an optimal rural settlement network and improved management of rural development are crucial for achieving SDG 11, which aims to promote sustainable communities (Lupenko *et al.*, 2020).

Ukraine's progress toward SDG 15, "Protect and restore terrestrial ecosystems," is significant, as it holds about 4.7% of the world's black soil (chernozems), covering over 34 million hectares of its territory (FAO, 2022). Additionally, Ukraine has the largest arable land area in Europe, surpassing other countries by at least 1.8 times (Cabinet of Ministers of Ukraine, 2021).

However, the trends in arable land and ecologically stabilising lands are negative: from 2015 to 2020, the area of arable land increased slightly, while hayfields and pastures decreased (State Statistics Service of Ukraine, 2023). This shift is driven by economic factors, including the growth of agricultural business, which calls for improved mechanisms to protect land and restore soil fertility, especially since most agricultural land is now privately owned (Ministry of Economy of Ukraine, 2020).

In response, the Ukrainian government approved the Strategy for Improving the Management of State-Owned Agricultural Land in 2017, but it was declared unconstitutional by the Constitutional Court in 2019. The turnover of agricultural land began on 1 July 2021, after new legislative frameworks were adopted, although the transition period has been complicated by martial law.

The introduction of agricultural land sales remains controversial. Public opinion is divided: while most people oppose the sale of agricultural land, they recognise landowners' rights to sell their land (Institute of Sociology of NAS of Ukraine, 2020, Ibatullin et al., 2024). This highlights the need for a socially acceptable and socially oriented land market model in Ukraine. Such a model should include restrictions on foreign land ownership, limit land concentration, ensure market transparency, prevent speculation, regulate the market, maintain controllability, and support local communities (Haidutskyi, 2020).

To intensify efforts toward achieving SDG 15 in Ukraine, it is essential to improve the regulatory framework for a unified state policy on land use, protection, and the

fight against land degradation and desertification. This includes establishing a land protection service and supporting scientific research for sustainable soil use. Key actions include conducting surveys and monitoring, updating land mapping, and clarifying the legal status of land.

Economic mechanisms to promote land protection and soil fertility restoration should also be enhanced. Additionally, restructuring the country's land use by reducing arable land, increasing forest cover, and restoring pastures, while aligning with international standards, is critical (FAO, 2021; Freiberg, 2024).

A positive development in this direction occurred in October 2023 when the Ukrainian Government launched a pilot project for mass land valuation. The project, initiated by the State Service of Ukraine for Geodesy, Cartography, and Cadastre, aims to create legal, technical, and technological tools for land valuation, including the establishment of a geographic information system as part of the State Land Cadastre (State Service of Ukraine for Geodesy, Cartography and Cadastre, 2023).

Ukraine follows European Union guidelines for land use and protection. In November 2021, the European Commission adopted the EU Soil Strategy for 2030, which aims to protect, restore, and ensure the sustainable use of soil under the European Green Deal. By 2050, the strategy aims to achieve resilient soil ecosystems, limit land take, reduce soil pollution, and restore degraded soils (European Commission, 2021).

The National Economic Strategy until 2030, approved by Resolution No. 179 of the Cabinet of Ministers of Ukraine on 3 March 2021, is the main strategic document guiding the Government's activities. It includes Direction 9, "Agricultural and Food Industry," and serves as the basis for ministries and executive bodies in developing action plans, programs, strategic documents, and legislation. These documents align with the strategy's goals, ensuring their execution contributes to achieving the defined strategic objectives.

In the "Agricultural and Food Industry" direction, Ukraine aims to become a global food security leader and a major supplier of high value-added food products and technological services for the agricultural sector.

Key strategic goals include, implementing stimulating agricultural policies, providing quality infrastructure for market players (land, irrigation, finance, education, transport, storage), ensuring availability of material resources for producers, balancing high- and low-margin production, supporting the food processing market, optimising product sales domestically and abroad, and ensuring the production and export of safe and healthy agricultural products.

Achieving these goals is expected to drive the development of agricultural sector through increased investment, exports, rural development, and land preservation.

Additionally, it aims to boost production of value-added products, improve yields, and implement effective agricultural policies (Cabinet of Ministers of Ukraine, 2021).

In the context of the full-scale invasion by the Russian Federation, Ukraine's agricultural sector has suffered some of the most significant losses: as of April 2023, the total estimated losses reached USD 8.7 billion, which accounts for about one-third of the total value of assets. The largest share of losses in the agricultural sector has been due to the destruction and damage to agricultural machinery.

The infrastructure for storing produced agricultural products has also suffered severe losses. The total capacity of destroyed grain storage facilities reaches 8.2 million tons of produced products, and damaged grain storage facilities amount to 3.25 million tons of simultaneous storage capacity. The agricultural sector in the Luhansk, Kherson, Donetsk, Kharkiv, and Zaporizhzhia regions has incurred the most significant damage.

The restoration of the agricultural sector in areas where hostilities occurred and adjacent to the line of demarcation is complicated by the necessity of neutralising and/or destroying explosive objects. Potential trends include: a decrease in the number of agricultural entities, changes in their location and specialisation due to significant economic losses; a decline in economic activity and a reduction in the rural population (Cabinet of Ministers of Ukraine, 2020).

3.2 Post-War Agricultural Resilience and EU Integration

The implementation of European integration in Ukraine's agricultural sector began with the 1997 Government resolution on aligning with EU directives and international standards. The first phase (1997-1998) focused on preparing the legislative framework, while the second phase (1998-2000) involved establishing sectoral programs to align production standards with European norms (Cabinet of Ministers of Ukraine, 1997).

The Association Agreement between Ukraine and the EU came into effect on 1 September 2017. This agreement plays a vital role in enhancing Ukraine's integration with the EU by aligning agricultural and rural development policies with EU standards. It includes cooperation on various areas such as agricultural market efficiency, investment, innovation, and environmental sustainability.

The Agreement has significantly boosted Ukraine's agricultural sector by creating a deep and comprehensive free trade area (FTA), which has led to increased agricultural exports. Tariff quotas and reduced import duties have facilitated annual export growth, while EU requirements have helped improve domestic producers' competitiveness (Puhachov, 2024). By the end of 2018, Ukraine had opened 85 new foreign markets for various products, developed 44 international certificates for

exports, and allowed around 850 agricultural enterprises to export to the EU, including 306 animal product producers (Zinchuk, 2019).

The Agreement addresses agriculture and rural development through Chapter 17 of Section V, focusing on economic and sectoral cooperation. This chapter outlines a gradual alignment of policies and legislation between the two parties in various areas, including promoting mutual understanding of agricultural and rural policies, strengthening administrative capacities at all levels, and fostering sustainable agricultural practices such as organic farming and biotechnology.

Additionally, it encourages knowledge exchange on rural development policies to improve the economic well-being of rural communities. Other areas of cooperation include enhancing market efficiency, investment conditions, and competitiveness in agriculture, promoting innovation through research, and harmonising standards in international forums.

The agreement also emphasises the dissemination of knowledge through training and information events and the implementation of quality policies for agricultural products. To achieve these goals, Ukraine and the EU are committed to gradually aligning Ukrainian law with the EU standards. However, the agreement does not specify deadlines for these adjustments, and market access will depend on the pace of legislative harmonisation (Chuzhykov, 2016).

However, the war has put Ukraine's agricultural sector in a tough spot. As a major exporter of grain and sunflower oil, Ukraine received trade benefits from the EU, such as the suspension of tariff rate quotas and import duties for a year, extended until June 2024 (Strubenhof, 2024). This support, regulated by the EU No 2022/870, helps stabilise trade and agriculture, though military actions and logistical challenges remain risks.

Technological backwardness, especially among small and medium enterprises, structural imbalances like the dominance of crop over livestock production, and a raw material focus on low value-added crops hinder competitiveness. Additionally, issues with social responsibility in agribusiness and solvency in agricultural production and processing continue to affect the sector (Puhachov, 2024).

The full-scale invasion of the Russian Federation into Ukraine has led to a significant reduction in crop areas, destruction of logistics for delivering agricultural products, and loss of essential production resources, severely impacting agroproduction. As a result, Ukraine's food self-sufficiency has declined. To restore and increase self-sufficiency, and to ensure agricultural food exports in the post-war period, the following measures are essential (Pyrozhkov *et al.*, 2024):

• Restore logistics for product and resource delivery to maintain the financial capacity of farmers and ensure stable production;

- Continue state procurement of critical foodstuffs during the wartime period to meet population needs;
- Conduct demining and land clearance;
- Establish a fund to support farmers who have suffered significant losses due to the war.

On 23 June 2022, the European Council granted Ukraine EU candidate status, marking the start of a process that will involve negotiations on agricultural and rural development, expected to continue until at least 2030. During this period, the European Commission will monitor Ukraine's reform progress through annual reports.

Only after these reviews will the Commission offer recommendations on starting specific accession negotiations. In its 8 November 2023 report, the Commission called on Ukraine to finalise the National Strategy for Agricultural and Rural Development for 2024-2030 and align its agricultural laws with EU standards, as outlined in the Association Agreement (Strubenhof, 2024).

In March 2024, the Ukrainian government approved the Ukraine Facility Plan, a financial support program from the EU for 2024-2027. This plan includes structural and economic reforms aimed at improving the business climate, promoting entrepreneurship, and enhancing key sectors for economic growth. It seeks to support Ukraine's recovery, modernisation, European integration, and sustainable development, with over 150 indicators across 69 reform areas, to be implemented through 2027.

Agriculture is one of the key sectors targeted for post-war recovery, with a focus on aligning the sector with EU policies, establishing a functional land market, improving food safety, attracting investment, and addressing demining. These reforms follow EU recommendations and the International Bank for Reconstruction and Development guidelines (Cabinet of Ministers of Ukraine, 2024a).

The Ministry of Agrarian Policy and Food of Ukraine is preparing a Strategy to ensure the sustainable development of agriculture and rural areas. The strategy aims to create a competitive and resilient agricultural sector that supports long-term food security, environmental protection, biodiversity, climate change mitigation, and the socio-economic stability of rural regions.

It is designed to align with Ukraine's EU accession goals and international commitments, focusing on economic, environmental, and social priorities (Ministry of Agrarian Policy and Food of Ukraine, 2024). In February 2024, the Ukrainian government approved an Action Plan based on recommendations from the European Commission's Progress Report on Ukraine's EU enlargement (Cabinet of Ministers of Ukraine, 2024b).

As Ukraine progresses on its path toward European integration, harmonising its agricultural sector with EU standards is essential. Agriculture is not only a cornerstone of Ukraine's economy but also a strategic sector for deepening its relationship with the EU. Adopting the EU's Common Agricultural Policy (CAP) is a crucial component of this alignment, offering a structure that promotes sustainable growth and advances Ukraine toward its European goals.

The CAP is traditionally structured around two pillars: market policy (supporting agricultural production) and rural development policy. Its key objectives, as outlined in the Treaty of Rome, include boosting agricultural productivity, stabilising markets, enhancing farmers' livelihoods, and ensuring affordable, quality food (Zinchuk, 2019).

Funded by the EU budget, the CAP aims to support farmers, improve productivity, ensure food security, address climate change, and sustain rural landscapes (European Commission, 2023b). It receives financial backing through the European Agricultural Guarantee Fund (EAGF) for market support and the European Agricultural Fund for Rural Development (EAFRD) for rural initiatives.

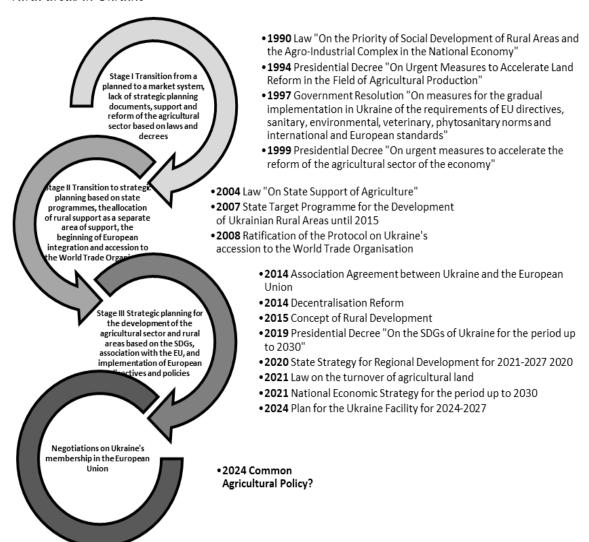
Core measures like tariffs, export subsidies, and production quotas are vital to agricultural policy. For Ukraine, adopting the CAP would integrate EU best practices and align with European agricultural standards. The CAP's focus on research, innovation, crisis food stockpiling, and sustainable agriculture is essential for long-term resilience.

Summarising the legal and hermeneutic analysis of legislation and strategic planning documents for agriculture and rural areas development, we identify four key stages of the planning process in Ukraine (Figure 1).

The CAP 2023-27 came into effect on 1 January 2023. Each of the 27 EU countries implements the CAP 2023-27 through a national CAP Strategic Plan, which combines a wide range of targeted measures aimed at meeting the specific needs of that EU country and ensuring tangible results concerning EU-level objectives. This also contributes to the implementation of the European Green Deal, promoting fairer farmer incomes, the preservation of rural areas, the environment and climate, and social stability (European Commission, 2023a).

However, it is important to consider that with Ukraine's accession to the EU, the reform of the CAP will become inevitable. First, the agricultural sector in Ukraine is very large, and funding measures in the agricultural policy sphere, including direct payments and rural development payments, at the same level as before, may become unaffordable. Representatives of the national governments of EU member states have also pointed this out.

Figure 1. Key stages of strategic planning for the development of agriculture and rural areas in Ukraine



Source: Own research results and elaboration.

The second reason is the distinctly dual nature of Ukraine's agricultural sector structure, which, on the one hand, is dominated by large agro-industrial companies and agribusinesses, and on the other hand, by personal (subsistence) farms that are not focused on producing marketable goods.

This fundamentally differs from the system of family farms characteristic of the agricultural sector in traditional EU member states (Strubenhof, 2024). Thus, the accession of Ukraine and other countries will be extremely challenging to implement without reforming the CAP.

4. Conclusions, Proposals, Recommendations

The analysis of strategic planning within Ukraine's agricultural sector reveals that it is rich in potential, yet facing numerous challenges that need to be systematically addressed. Over the years, the country has made substantial progress in aligning its agricultural policies with European standards, especially in the context of Ukraine's European integration. Strategic planning for the development of the agricultural sector and rural areas is ongoing, and state policies in these areas are aligned with Sustainable Development Goals, European standards, and the norms of the Association Agreement between Ukraine and the European Union.

However, the sector's development has been hindered by structural inefficiencies, limited investment, outdated technologies, and an overreliance on raw commodity exports. These factors have collectively contributed to the lag in competitiveness when compared to leading agricultural economies within the EU.

Despite the strong position of Ukrainian agribusinesses in global food markets, the development of the agricultural sector and rural areas in Ukraine is characterised by lagging behind advanced countries. This is primarily manifested in low competitiveness of production, non-compliance with international standards, low levels of investment and dependence on state funding, low production efficiency, and the use of outdated technologies.

Other challenges include reliance on raw commodity exports and poor soil conditions. Specific issues in rural development include declining human capital, challenges in local governance implementation, and utilisation of community natural-resource potential.

The agricultural sector remains pivotal for Ukraine's economic stability and food security, particularly in the challenging context of ongoing military conflict. Despite the sector's resilience, the need for modernisation and sustainable development has become even more pressing.

The disruptions caused by the war have underscored the importance of building a more robust agricultural infrastructure capable of withstanding external shocks, while also ensuring self-sufficiency in food production.

To sustain and accelerate progress, it is crucial to prioritise policies that not only enhance agricultural productivity but also promote sustainable rural development. This includes a shift from short-term support mechanisms to long-term strategies aimed at strengthening the socio-economic fabric of rural communities.

The development of diversified economic activities, better integration of local stakeholders, and fostering innovation in agribusiness are essential to achieving these goals.

A key aspect of strategic planning must focus on the restoration and sustainable management of Ukraine's vast agricultural land resources. Effective land reform, enhanced regulatory frameworks, and support for small and medium enterprises will be vital to improving the efficiency of land use and increasing agricultural yields. In parallel, measures to boost environmental sustainability and soil fertility, aligned with European green policies, will help in achieving the Sustainable Development Goals (SDGs) related to agriculture and rural livelihoods.

Ukraine's agricultural and rural development policies require the application of modern economic science achievements and its key theories, consideration of EU Common Agricultural Policy principles, and a gradual transformation from unstable and selective support policies for agricultural producers to sustainable rural development policies, self-sufficiency of local communities, and rational use of natural resources.

The process of European integration offers Ukraine a pathway to adopt best practices from the EU's Common Agricultural Policy (CAP), thereby promoting competitive, diversified, and sustainable agriculture. It is imperative to continue harmonising national policies with EU directives, particularly in areas such as food safety, rural development, and environmental protection. By leveraging EU support frameworks, Ukraine can enhance its agricultural exports, stimulate rural economic growth, and ultimately secure a stronger position in global food markets.

Finally, fostering cooperation between governmental agencies, research institutions, and international partners is essential for the successful implementation of these strategies. Ukraine's agricultural sector, though challenged by current adversities, holds significant potential for growth and resilience. By focusing on integrated strategic planning, aligned with both national priorities and European standards, Ukraine can ensure sustainable development, food security, and a more prosperous future for its rural communities.

Structural transformations of Ukraine's the agricultural sector and rural areas, utilising international experience and implementing European standards, are expected to contribute to ensuring Ukraine's food security through the development of high-efficiency crop and livestock farming, rational land use and effective land relations, diverse forms of management and agro-industrial production, restoration of agricultural lands, and sustainable rural development.

References:

Borodina, O.M., Prokopa, I.V., Popova, O.L. (Eds). 2015. Community-Based Rural Development Policy in Ukraine: Scientific Report. Kyiv, IEF of NAS of Ukraine. Cabinet of Ministers of Ukraine. 1997. Resolution on measures for the phased implementation in Ukraine of the requirements of European Union directives, sanitary, ecological, veterinary, phytosanitary norms and international and European

- standards, No 244. Available at: https://zakon.rada.gov.ua/laws/show/244-97-%D0%BF#Text.
- Cabinet of Ministers of Ukraine. 2015. Order on the approval of the Concept for the development of rural areas, No. 995. Available at: https://zakon.rada.gov.ua/laws/show/995-2015-%D1%80#n8.
- Cabinet of Ministers of Ukraine. 2020. State strategy of regional development for 2021–2027. Available at: https://mtu.gov.ua/content/strategichne-planuvannya-regionalnogo-rozvitku.html.
- Cabinet of Ministers of Ukraine. 2021. Resolution on approval of the National Economic Strategy for the period until 2030, No 179. Available at: https://zakon.rada.gov.ua/laws/show/179-2021-%D0%BF#n25.
- Cabinet of Ministers of Ukraine. 2024a. Plan for Ukraine Facility, 2024-2027. Available at: https://www.kmu.gov.ua/news/uriad-zatverdyv-plan-dlia-realizatsii-prohramy-ukraine-facility.
- Cabinet of Ministers of Ukraine. 2024b. Plan of measures to implement the recommendations of the European Commission, presented in the Report on the progress of Ukraine in the framework of the 2023 European Union Enlargement Package. Available at: https://www.kmu.gov.ua/npas/pro-zatverdzhennia-planuzakhodiv-z-vykonannia-rekomendatsii-ievropeiskoi-komisii-predstavlenykh-u-t90224.
- Chuzhykov, V. (Ed.). 2016. Regional policy of the European Union. Kyiv, KNEU.
- Committee on Economic Reforms under the President of Ukraine. 2010. Prosperous Society, Competitive Economy, Efficient State: Program of Economic Reforms for 2010-2014. Kyiv, Committee on Economic Reforms under the President of Ukraine.
- European Commission. 2021. EU Soil Strategy for 2030: Reaping the benefits of healthy soils for people, food, nature and climate. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Brussels, COM(2021) 699 final. Available at: https://environment.ec.europa.eu/document/download/ae853f10-c9a2-4665-a9f2
 - c29d11c49374_en?filename=COM_2021_699_1_EN_ACT_part1_v4_0.pdf.
- European Commission. 2023a. CAP Strategic Plans. Available at: https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans en.
- European Commission. 2023b. The Common Agricultural Policy at a glance. Available at: https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/cap-glance en.
- FAO. 2021a. Food and Agriculture Organization of the United Nations. The State of the World's Forests 2020: Forests, biodiversity and people. FAO. https://openknowledge.fao.org/items/696bdc92-01b8-400a-8117-a27386b61046.
- FAO. 2021b. Standards on good agricultural and environmental conditions of land: Introductory handbook. Available at: https://openknowledge.fao.org/server/api/core/bitstreams/979b293d-264d-43c0-b2c8-3b076449814b/content.
- Freiberg, R. 2024. EU agriculture ministers agree on changes to GAEC rules. Available at: https://www.agriland.ie/farming-news/eu-agriculture-ministers-agree-on-changes-to-gaec-rules.
- Hadzalo, Y.M., Zhuk, V.M. 2015. Scientific foundations of the development of agrarian entrepreneurship and rural areas according to the village-preserving model (scientific report). Kyiv, ESC IAE.

- Haidutskyi, P.I. 2015. Agrarian reform of L.D. Kuchma in Ukraine: historical and economic aspects. Ekonomika APK, 1, 5-13.
- Haidutskyi, P.I. 2020. Agrarian reform of L.D. Kuchma in Ukraine. Kyiv, DKS Center.
- Halchynskyi, A.S. et al. 2004. Strategy of economic and social development of Ukraine for 2004-2015: On the path of European integration. Kyiv, IPC of the State Committee of Statistics of Ukraine.
- Ibatullin, S., Dorosh, Y., Sakal, O., Krupin, V., Kharytonenko, R., Bratinova, M. 2024. Agricultural Land Market in Ukraine: Challenges of Trade Liberalization and Future Land Policy Reforms. Land, 13(3), 338. https://doi.org/10.3390/land13030338.
- Institute of Sociology of the National Academy of Sciences of Ukraine. 2020. Ukrainian society: monitoring social changes, 7(21). Available at: https://isoc.com.ua/assets/files/monitoring/mon2020.pdf.
- Lupenko, Yu.O. et al. 2020. Strategic directions of sustainable development of rural areas until 2030. Kyiv, ESC IAE.
- Ministry of Agrarian Policy and Food of Ukraine. 2024. Rural development. Available at: https://minagro.gov.ua/napryamki/rozvitok-silskih-teritorij.
- Ministry of Economic Development and Trade of Ukraine. 2017. Sustainable Development Goals: Ukraine. Available at:
 - https://www.kmu.gov.ua/storage/app/sites/1/natsionalna-dopovid-csr-Ukrainy.pdf.
- Ministry of Economy of Ukraine. 2020. Sustainable Development Goals: Ukraine. Voluntary National Review. Available at: https://me.gov.ua/Documents/Download?id=4819b04d-99d6-47d3-a0db
 - fd4a4215f13d.
- Onishchenko, A.M. et al. 1990. Intensive development of the agro-industrial complex. Kyiv, Naukova Dumka.
- President of Ukraine. 2019. Decree on the Sustainable Development Goals of Ukraine for the period until 2030, No 722/2019. Available at: https://zakon.rada.gov.ua/laws/show/722/2019#Text.
- Puhachov, M. 2024. Prospects for extending the preferential trade regime with the EU (agricultural products) and the impact of such an extension on the development of production and trade relations between Ukraine and the EU in the agricultural sphere. Agricultural policy report APD/APB/05/2023. Available at: https://www.apd
 - $ukraine.de/fileadmin/user_upload/Agrarpolitische_Berichte/APD_Pugachov.pdf.$
- Pyrozhkov, S.I., Khamitov, N.V., Holovakha, E.I. (Eds.). 2024. Preservation and development of Ukraine in conditions of war and peace: a national report. Kyiv: Institute of State and Law named after V.M. Koretskyi of the National Academy of Sciences of Ukraine.
- State Service of Ukraine for Geodesy, Cartography and Cadastre. 2023. The Government has made a decision the State Service of Ukraine for Geodesy, Cartography and Cadastre is starting the implementation of a pilot project on mass land assessment. Available at: https://land.gov.ua/uryad-pryjnyav-rishennya-derzhgeokadastr-rozpochynaye-realizacziyu-pilotnogo-proektu-shhodo-provedennya-masovoyi-oczinky-zemel.
- State Statistics Service of Ukraine. 2022. The statistical yearbook "Balances and consumption of the main food products by population of Ukraine". Kyiv, State Statistics Service of Ukraine. Available at:
 - https://www.ukrstat.gov.ua/druk/publicat/kat_u/2022/zb/07/Zb_bsph2021.pdf.
- State Statistics Service of Ukraine. 2023. The Statistical Yearbook "Agriculture of Ukraine"

- for 2022. Kyiv: State Statistics Service of Ukraine. Available at: https://www.ukrstat.gov.ua/druk/publicat/kat_u/2023/zb/09/S_gos_22.pdf.
- Strubenhof, H.V. 2024. Challenges and chances in the context of Ukraine's accession to the EU. What representatives of agrarian and food policy should know. Agricultural policy report. Available at: https://www.apd-ukraine.de/fileadmin/user_upload/Agrarpolitische_Berichte/APD_Strubenhoff_UA.pdf.
- Verkhovna Rada of Ukraine. 1990. Law of Ukraine "On the priority of social development of the village and agro-industrial complex in the national economy" No 400-XII. Available at: https://zakon.rada.gov.ua/laws/show/400-12#Text.
- Zinchuk, T.O. (Ed.) 2019. Agrarian policy of the European Union: challenges and prospects. Kyiv: TsUL.