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DIVIDED HARVESTS

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Divided Harvests

An analysis of the potential implications of Ukraine's EU membership for Polish agriculture and agri-food processing

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Divided Harvests

Edwin Bendyk

Agriculture is a branch of the economy that cannot be described solely in purely economic terms. Food production involves not only breeding, cultivation, processing, packaging, distribution and storage technologies. It also encompasses a sphere of cultural practices linked to the fundamental human need to satisfy hunger.

The importance of these practices is best expressed by the statement of the French expert on cuisine and gastronomy, Jean Anthelme Brillat-Savarin. In his 1826 work *Physiology of Taste*, he argued: "The fate of a nation depends on the way that they eat". Was he exaggerating? Is it not through culinary customs that we imagine representatives of other cultures and nationalities? Borscht, although popular in Poland, symbolises Ukrainianness. The question of which dishes best express Polish identity remains a never-ending dispute. Sociological studies, however, indicate that the most widespread dish, uniting Polish people beyond any divisions, is vegetable salad.

We eat to satisfy hunger, and at the same time, through what and how we eat, we express our identity, class affiliation and other values. In times of threats and crises, concerns over food take on particular importance, prompting discussions on how to ensure supply on an individual level and whether striving for the greatest possible food sovereignty should be part of security policy. It is therefore hardly surprising that agriculture arouses greater emotions than its position within the national economy might suggest.

We saw this in 2023, when farmer protests broke out across Europe against the EU Green Deal policy and the opening of borders to agricultural production from Ukraine. In Poland, these protests took the form of a months-long blockade of Polish–Ukrainian border crossings. The border blockade caused shock in Ukraine and lack of understanding both on a practical and symbolic level. After all, Poland had acted as a key strategic partner in the war with Russia, yet the suspension of trade flows directly weakened Ukraine's potential – reduced revenues from customs duties, which fully financed the defence effort,

translated into the need to limit arms purchases. At the same time, the sight of spilled grain provoked extremely strong emotions, reactions of anger and outrage. The experience of the Holodomor means that Ukrainians perceive behaviours involving the destruction of grain as sacrilege.

The scale of the protests, their duration and the high level of social support they received demonstrated that obstacles may emerge in the process of Ukraine's accession to the European Union that could slow integration, even though EU enlargement objectively serves the interests of Poland and other European countries. The implementation of this strategic goal, however, may be halted by public emotions triggered by interest groups fearful that they will lose out from integration, since Ukraine, as a new Member State, would become a competitor with excessively large advantages.

These concerns should not be dismissed – many of them have rational foundations. Many, however, are based on stereotypes and a distorted picture of the potential threat. The phrase "Ukrainian agriculture" evokes various associations: fertile black soils providing excellent conditions for agricultural production, the concentration of this production within agroholdings resembling former latifundia, cheap labour and lack of regulation, creating conditions for unfair competition.

The phrase "Polish agriculture" brings other ideas to mind, and juxtaposing them with associations relating to Ukrainian agriculture leads to an inevitable conclusion: Polish farmers are doomed to lose in competition against their Ukrainian counterparts. Are they really? The answer requires arguments other than associations based on information taken out of context, reinforced by fantasies about boundless Ukrainian black-soil steppes as well as oligarchs controlling production and its export.

Indeed, it is enough to visit any Ukrainian shop to see that the shelves with dairy products or cold cuts are full of goods brought from Poland. Trade data confirm that Polish food exports to Ukraine far outstrip imports from that country. This must mean that Polish producers enjoy a competitive advantage and are capable of reaching the large neighbouring market with their offer. Will this advantage diminish after Ukraine's integration with the European Union?

The answer depends on many factors and cannot be predicted today. Similarly, information about the successes of some agri-market participants should not obscure the reality in those areas where it is indeed difficult to compete with Ukrainian producers on wheat, maize or sunflower. It is, however, clearly visible that breaking down the general notions of "Ukrainian agriculture" and

“Polish agriculture” into their component parts allows us to see a much more interesting picture than that of hostile armies standing opposite one another.

Reality is far more complex and nuanced, as is excellently demonstrated in the report *Divided Harvests* by Wawrzyniec Czubak, Sławomir Kalinowski and Vitaliy Krupin. The details presented by the authors allow us to reach beyond a confrontational conversation model and replace it with a discussion based on arguments facilitating efforts to leverage synergy and potential cooperation, making use of the strongest features of the agricultural sector in Poland and Ukraine.

Only such a discussion, relying on substantive arguments, can reduce the risk of escalating emotions provoked both by a sense of threat to economic interests as well as by fears based on associations and images suggested by cultural stereotypes. We hope that the report *Divided Harvests* will contribute to this discussion.

Conclusions

Conclusions for Poland

- **Increasing competition.** Polish farmers may face greater competition from Ukrainian producers, especially in the sector of agricultural commodities such as grains, sunflower, or rapeseed. Ukrainian products may be cheaper, creating price pressure on the Polish market.
- **Price pressure on Polish farmers.** Ukrainian agricultural products, particularly raw materials like grains and oils, may be less expensive than their Polish counterparts. The influx of cheap food from Ukraine could exert downward pressure on prices, leading to difficulties for Polish farmers in maintaining competitiveness, especially for smaller producers.
- **Marginalisation of less efficient Polish producers.** Polish farms with lower productivity, especially small family-run operations, may struggle to compete with the more efficient and better-organised Ukrainian agroholdings, which could gradually push Polish farms out of the market.
- **Opportunities for cooperation and expansion.** Poland has the opportunity to expand its exports to Ukraine and strengthen economic cooperation, particularly in the agri-food processing sector. By integrating with the Ukrainian market, Polish companies could lower production costs by sourcing cheaper raw materials from Ukraine.
- **Adjustment of agricultural policy.** In light of Ukraine's potential EU membership, Poland will need to adjust its agricultural policy to meet the new realities of the internal market. It may be necessary to strengthen support programmes for Polish farmers to help maintain their competitiveness.
- **Modernisation and innovation.** Poland has the chance to play a key role in the modernisation of Ukrainian agriculture by sharing its experience in implementing modern technologies and farming practices. This could also accelerate the ecological transformation in both countries.

Conclusions for Ukraine

- **Increasing competitiveness.** EU membership would give Ukraine access to broader markets, potentially boosting the international competitiveness of Ukrainian agriculture. However, it would require aligning production standards and regulations with EU requirements, which may demand significant investments.
- **Access to EU funds.** Upon joining the European Union, Ukraine could benefit from EU funds to modernise its agricultural sector, including support for small and medium-sized farms that play a crucial role in labour -intensive agricultural sectors and provide employment for many people.
- **Agricultural structure.** The dual structure of Ukrainian agriculture – dominated by agroholdings and small individual farms – may pose challenges in the context of integration with the EU market. Agroholdings are more competitive and export-oriented, but the marginalisation of smaller farms could deepen inequalities within the agricultural sector.
- **Land ownership reform.** Lifting the moratorium on land sales and further reforms in land ownership could strengthen Ukraine's agricultural market, but they also raise concerns about land concentration in the hands of oligarchs and foreign investors.
- **Risk of agroholding dominance.** Agroholdings, which already control a large share of Ukrainian farmland, could further increase their dominance after integration with the EU market, threatening to marginalise smaller farms even more and limiting diversity within the agricultural sector.
- **Challenges in meeting EU standards.** While Ukrainian agriculture has enormous potential, it may face serious difficulties in adapting to the EU's strict production, environmental, and food safety standards. This could delay full integration and hinder the potential benefits of EU membership.

Conclusions for the European Union

- **New market and agricultural policy challenges.** Ukraine's accession to the EU would expand the Union's agricultural market, leading to an increased supply of agricultural commodities. The European Union would need to adjust its Common Agricultural Policy to address the needs of the Ukrainian agricultural sector as well as the risks stemming from supply pressures.
- **Economic integration.** Integrating Ukrainian agriculture into EU structures and subjecting it to the current regulations of the Common Agricultural Policy (including environmental and climate frameworks) could

contribute to more sustainable development in the region. The European Union could become the main recipient of Ukrainian agricultural products, boosting mutual economic cooperation.

- **Ecological transformation.** From the EU's perspective, Ukraine's integration could help promote sustainable agricultural practices in the region, particularly in terms of environmental protection and the implementation of modern precision farming techniques (currently accessible mainly to large entities).
- **Challenges for EU competitiveness.** Ukraine's entry into the European Union would increase competition within the common market, potentially affecting Member States with a significant agricultural share in their economies. On the one hand, greater competition may drive efficiency and innovation across the agri-food sector. On the other hand, the Common Agricultural Policy would need to be adapted to ensure fair competition, particularly for smaller farms across the Union. It would be worth considering compensatory mechanisms to support the sustainable development of agriculture in all Member States while enabling Ukraine's integration in a way that stabilises the market.
- **Risk of production concentration and uneven impact on the agricultural sector.** Ukraine's accession to the EU could lead to production concentration in the hands of the largest entities, potentially weakening the competitiveness of smaller farms in some EU countries. Ukrainian agroholdings, with their large-scale production capacities, might gain a competitive edge over fragmented farming sectors in countries like Poland, Romania, or Lithuania. Therefore, it would be important to consider agricultural policy instruments that ensure equal opportunities for different types of farming, such as support for small and medium-sized farms or the promotion of short supply chains.
- **Impact on the environment and European climate goals.** While Ukrainian agroholdings have the potential to adopt modern environmentally friendly technologies, integrating Ukraine into the EU market could increase environmental pressures due to the intensification of large-scale agricultural production. It will be crucial to ensure that alignment with EU standards goes beyond formal compliance and is implemented in practice. In this context, support mechanisms for regenerative practices, carbon farming, and water resource protection should be considered to enable the harmonious inclusion of Ukraine in the EU's climate policy framework.

Summary

The purpose of this study is to provide a comprehensive assessment of the potential impact of Ukraine's membership in the European Union, particularly on the Polish agri-food sector. This process involves a range of challenges and opportunities that require careful examination to enable better preparation of Polish agriculture and the processing industry for the upcoming changes.

Key areas of integration impact

The analysis focuses on the key agricultural production sectors in Ukraine that are likely to have the greatest impact on Polish agriculture, including the production of grains, vegetables, fruits, and meat. Ukraine, as one of the world's largest exporters of agricultural commodities, could become a serious competitor for Polish producers on the European single market. As a member of the European Union, Poland must be prepared for increased price and quality competition, particularly in the case of agricultural commodities produced on a mass scale.

Opportunities from integration

One of the key opportunities arising from Ukraine's membership in the European Union is the potential to increase economic and trade cooperation between Poland and Ukraine. Poland could benefit from cheaper agricultural raw materials imported from Ukraine, which could lower production costs in the processing industry and strengthen its competitiveness on international markets. Moreover, integration could lead to joint investments in agricultural infrastructure, technologies, and innovations, which in the longer term may bring benefits to both Poland and Ukraine.

Threats from integration

Despite the opportunities that market integration brings, there are a number of risks that could negatively affect Polish agriculture. Most notably, the influx of large quantities of cheaper Ukrainian agricultural products could exert price pressure on Polish producers. Given the fragmented nature of domestic agriculture, without finding market niches or developing high value-added products at the farm level, Ukrainian competition is likely to hit smaller farms

particularly hard. Ukrainian agroholdings, with their vast land resources, modern technologies, and professional management, could pose serious competition for small and medium-sized Polish farms with a standard profile of raw material production, which may struggle to compete on the integrated market.

Impact on the competitiveness of Polish farms and the processing industry

The analysis shows that integration will have a varied impact on different groups of agricultural producers in Poland. Large farms (especially livestock producers) and processing enterprises may benefit from cheaper raw materials (for feed production or processing) imported from Ukraine, which will increase their competitiveness on the EU market. On the other hand, smaller family farms may struggle to compete with low-priced Ukrainian products, which could lead to their marginalisation. In this situation, government support will be essential to help these farms adapt to the new market conditions, including increasing added value, promoting horizontal integration, and developing non-agricultural activities on the farm.

Changes in the structure of agricultural production

One of the potential effects of integration could be a shift in Polish agricultural production towards higher value-added products. Poland, as a country with a strong processing sector, may focus on developing more technologically advanced and processed products, while Ukraine would serve as a supplier of raw materials. However, such a shift would require investments in modern technologies and innovations to enhance the competitiveness of Polish products on international markets.

Trade in agri-food products

The integration of Ukraine with the European Union could also impact trade in agri-food products between Poland, Ukraine, and other EU Member States. Poland may gain access to Ukrainian raw materials at lower costs, strengthening its position as an exporter of processed products. However, it is also important to consider the potential increase in competition on the EU market, where Ukrainian products could displace local producers.

Adjustment of agricultural policy in Poland

The analysis indicates the need to adapt Poland's agricultural policy to the new market realities that will arise from Ukraine's integration with the European Union. Poland will need to introduce new support programmes for its farmers, especially for relatively smaller farms, to help them find their niche in the market, for example through labour-intensive production making use of their available workforce. Modifications to existing agricultural policy instruments should also include support for innovation, sustainable development, and the use of modern precision farming techniques and technologies, so that Polish agriculture can effectively meet the new challenges.

Significance of this study

This analysis is of key importance for the future of the Polish agri-food sector in the context of the European Union's enlargement to include Ukraine. Understanding the opportunities and risks associated with integration is essential for developing effective political and economic strategies that will help Polish farmers and entrepreneurs maximise potential benefits while minimising risks. The study provides insights that can assist policymakers and representatives of the agri-food industry in preparing for the upcoming changes and challenges.

Opportunities and Threats

Potential benefits and risks arising from Ukraine's membership in the European Union

Opportunities	Threats
Polish perspective	
New opportunities for cooperation. Poland could benefit from collaboration with Ukraine in agricultural processing, logistics, and agricultural technologies. The two countries could complement each other in production and trade, which may enhance the competitiveness of the Polish agri-food sector.	**Price pressure and competition.** Ukraine's accession to the EU may lead to an influx of cheaper Ukrainian agricultural products, causing price pressure on the Polish market. Polish farmers, particularly small and medium-sized ones engaged in standard agricultural production, may find it difficult to compete with large Ukrainian agroholdings.
Access to cheaper raw materials. Ukrainian agricultural products, especially raw materials, may be more affordable due to lower production costs. Poland could use these as inputs for processing and feed production, which may lower production costs and increase competitiveness on the European market.	**Risk of marginalising small farms.** Ukrainian agroholdings possess vast land resources and modern technologies, which may result in less efficient Polish farms – especially those that are family run – being gradually pushed out of the market.
Ukrainian perspective	
Increased access to EU markets and funds. EU membership would grant Ukraine access to European funding, which could support the modernisation of its agricultural sector. This could contribute to improved agricultural infrastructure and technology, thereby increasing production efficiency.	**Difficulties in meeting EU standards.** High EU standards on agricultural production, environmental protection, animal welfare, food safety, and compliance in the agri-food industry may pose significant challenges for Ukrainian agriculture. Failure to meet these standards could delay full integration and reduce the potential benefits of EU membership.

Export expansion. Integration with the EU market would offer Ukraine greater export opportunities, particularly in agricultural commodities such as grains, vegetable oils, and seeds, which already offer strong potential in the EU market.	**Dependence on large agroholdings.** A large share of Ukraine's agricultural sector is controlled by massive agroholdings, which may lead to concentration of economic power and marginalisation of smaller producers. This could yield a negative impact on the development of sustainable agriculture.
EU perspective	
Strengthening food security. Ukraine is one of the world's key grain exporters. Its membership in the EU could bolster the Union's food security, especially in light of global agricultural supply volatility.	**Risk of destabilising the EU agricultural market.** Ukrainian products, produced at lower costs and on a large scale, may exert price pressure on the EU market. On the one hand, this could benefit consumers through cheaper food and support processors as well as feed producers with lower input costs. On the other hand, it may lead to a decline in farmers' incomes across EU countries. To mitigate the risk of market destabilisation, the Common Agricultural Policy should include adjustment mechanisms such as support for small and medium-sized farms, investments in cost-reducing technologies, support for producer integration, income diversification on farms, the promotion of short supply chains, and a market monitoring system enabling a rapid response to potential disruptions.
Boosting the competitiveness of the EU agricultural sector. Ukraine's integration with the EU could contribute to improving the competitiveness of European agriculture, particularly through access to cheaper raw materials from Ukraine, which would reduce production and processing costs.	**Conflicts over agricultural policy.** Ukraine's accession may require changes to the EU's Common Agricultural Policy, potentially sparking conflicts among Member States – especially those concerned about competition from Ukrainian agriculture and possible reductions in their share of agricultural support under the revised policy.

Both the opportunities and threats associated with Ukraine's potential membership in the European Union are far from clear-cut. The process carries significant risks, but at the same time opens up many possibilities. On the one hand, integration could bring economic benefits such as increased competitiveness of Polish and EU agriculture and access to Ukrainian raw materials at

lower costs. On the other hand, the influx of cheaper agricultural products and concentration of land within large agroholdings could lead to serious problems, including the marginalisation of smaller farms and destabilisation of the EU agricultural market. To fully harness the potential and minimise the risks, it will be essential to implement appropriate regulations and strategies that ensure sustainable development and protect the interests of all stakeholders.

Significance of Ukraine's Integration for the Polish Agri-food Sector

Ukraine's potential membership in the European Union is a development of major significance for the future of both Ukraine and the entire EU. **The integration of Ukraine's agricultural market with that of the EU brings numerous opportunities but also serious challenges.** For Poland, as one of the key players on the EU agricultural market, the consequences of this process will be particularly important. This analysis aims to provide a comprehensive examination of the potential impacts of Ukraine's EU accession on Polish agriculture and the agri-food processing sector, taking into account both short-term and long-term perspectives.

The agri-food sector plays a vital role in the Polish economy, supplying food for the domestic market and serving as a significant component of exports. Confrontation with Ukrainian agriculture – which has substantial production potential but also faces a range of structural issues – may pose a serious challenge for Polish producers. **The integration of these two markets could lead to significant changes in the structure of agricultural production, trade, and agricultural policy, both in Poland and across the European Union.** On the one hand, Poland may benefit from increased access to Ukrainian agricultural products, which could help reduce production costs and boost the competitiveness of Polish enterprises on the European market. On the other hand, the influx of Ukrainian products may exert pressure on Polish farmers, who might struggle to compete with lower-priced goods from Ukraine. Therefore, it will be essential to conduct a thorough analysis of both the benefits and risks associated with the integration of these markets.

Moreover, **Ukraine's membership in the EU will influence the Union's agri-food policy**, including common regulations on production standards, environmental protection, and support for farmers, all of which will need to be adapted to the new structure of EU agriculture. The current provisions of the Common Agricultural Policy already impose high requirements in terms of food quality and environmental protection, but Ukraine's integration may

lead either to a further tightening of these standards to ensure uniform norms across the Union, or conversely, to their modification towards greater flexibility, allowing for the gradual adjustment of Ukraine's agricultural sector. Poland, as one of the largest beneficiaries of EU agricultural funds, will have to adapt its development strategies and plans to the new reality, which may involve modifying existing support programmes – for example, direct payments, market protection instruments, or environmental investment support mechanisms – in order to strengthen the competitiveness of the Polish agri-food sector within the new market framework.

From a long-term perspective, the integration of Ukrainian agriculture with the EU may contribute to the sustainable development of the agricultural sector in the region by promoting innovation, increasing production efficiency, and supporting ecological transformation. Although Poland is not a leader in advanced agricultural technologies due to its fragmented farm structure, the country can nonetheless play a significant role in helping small and medium-sized farms adapt to EU standards and transferring knowledge on sustainable farming practices. This cooperation may be particularly valuable for Ukrainian family farmers and medium-sized agricultural enterprises, while large agroholdings with international capital will likely be able to adapt to the new conditions independently, without the need for Polish mediation.

In consequence, many questions arise with no simple answers.

How should we prepare for this?

Are we ready for changes in our relationships with suppliers, buyers, or trade partners?

What are the development prospects for specific segments of the agri-food market in Poland and Ukraine?

Are there legal regulations, administrative, economic, or other (e.g. cultural) barriers that hinder the export of our products?

What are the potential risks associated with importing products from Ukraine?

We hope that our analysis will serve as one of many voices in the broader discussion on the future of Polish agriculture in the context of integration with the Ukrainian market. Our aim is to provide reliable information and analysis that will help Polish agricultural producers, processors, and policymakers better

understand the potential consequences of this process and make informed decisions.

Specific objectives of the analysis

The main objective of this analysis is to assess the potential impact of Ukraine's membership in the European Union on the Polish agri-food sector. The specific objectives of the analysis are as follows:

- **to identify the key areas in which market integration may have the greatest impact** on Polish agriculture (e.g. grain, vegetable, fruit, and meat production);
- **to examine the opportunities and threats** arising from the integration of Ukraine's agri-food market with the EU;
- **to assess the impact on the competitiveness** of Polish farms and agri-food processing enterprises;
- **to analyse the effects of integration on different groups of producers** (e.g. large farms, small family farms, cooperatives);
- **to explore potential changes in the structure of agricultural production in Poland** (e.g. a shift towards higher value-added products);
- **to analyse the impact of integration on trade in agri-food products between Poland and Ukraine**, as well as with other EU countries;
  - ◊ **to identify the necessary adjustments to agricultural policy in Poland** in response to new market conditions (e.g. introduction of new support programmes, modification of existing instruments).

The significance of the topic for the Polish agri-food sector

Ukraine's accession to the European Union holds major significance for the Polish agri-food sector for several reasons:

- **Competition:** Ukrainian agri-food producers could pose serious competition to Polish businesses, particularly in segments focused on low value-added products.
- **Expansion opportunities:** Market integration may open new avenues for Polish companies to expand into the Ukrainian market.
- **Cooperation:** Collaboration with Ukrainian producers could bring mutual benefits in food production, processing, distribution (transport, logistics, marketing), and joint expansion into foreign markets.
- **Impact on agricultural policy:** Ukraine's membership could require adjustments to the EU's Common Agricultural Policy, which in turn may

affect Polish agricultural policy and the economic conditions of Polish farmers.

Understanding the potential consequences of Ukraine's EU membership is essential for developing appropriate strategies both at the national level and within individual enterprises.

Why is understanding these consequences crucial?

National-level strategies	Enterprise-level strategies
Poland as a neighbour. For Poland, as Ukraine's closest EU neighbour, the country's accession will have direct consequences – from changes in trade flows and investment to increased mobility of people and new challenges in the area of security.	**New opportunities.** Ukraine's EU membership could offer Polish enterprises new business opportunities. These include both expansion into a new market and the potential for collaboration in joint projects supported by EU instruments.
The European Union. For the entire European Union, Ukraine's accession will mean an enlarged internal market, but also new challenges related to differences in economic development, social and institutional capacity, as well as the environmental impact of production processes.	**New challenges.** Membership will bring new challenges. Market competition is likely to intensify, and businesses will have to become more competitive to maintain or improve their position.
International relations. Ukraine's accession to the EU will have a significant impact on international relations, particularly on the EU's relationship with Russia.	

Source: authors' own elaboration

Poland's and Ukraine's Path to Democracy – Historical Background

The transformation of Polish and Ukrainian agriculture and the agri-food industry is a key element of the broader process of democratisation and modernisation in both countries. It also represents an important step in their pursuit of integration with global markets and alignment with European economic standards. As a result of the socio-economic changes that took place in Central and Eastern Europe after the fall of the Soviet Union, **both Poland and Ukraine faced the challenge of restructuring their economies**. The centrally planned systems that had dominated for decades had to be replaced with modern market mechanisms. Despite starting from a similar point, the development paths of the two countries diverged significantly after 1990, leading to different economic outcomes.

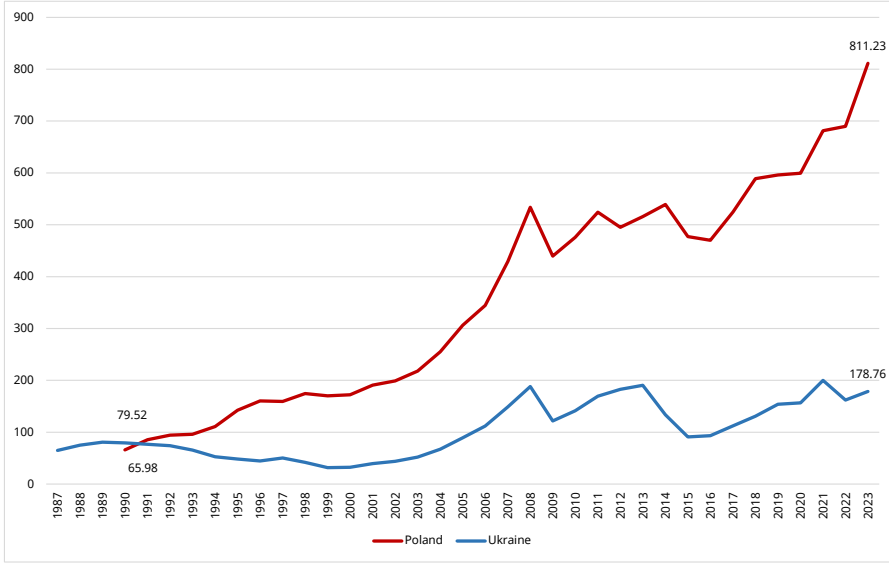
In 1990, Ukraine, with a nominal GDP of **USD 79.52 billion**, was ahead of Poland, whose GDP at the time stood at **USD 65.98 billion**.[1] This indicates that Ukraine held greater economic potential at the beginning of the transformation period. However, over the following decades, this initial advantage quickly faded, and Poland embarked on a more dynamic path of economic development. After 1990, Poland implemented a series of economic reforms that accelerated its transition to a market economy and democratic political system. For example, in 1991, Poland signed association agreements with the European Union, paving the way to full membership in 2004. During this time, Poland achieved a high rate of economic growth, which led to an improvement in living standards and the modernisation of the agri-food sector. **Between 1990 and 2023, Poland's GDP increased twelvefold**, reaching **USD 811.23 billion** in 2023. The export of Polish agri-food products was a key element of this success, and Poland became one of the leading food exporters in the European Union.

In the same period, Ukraine faced numerous challenges, such as political instability, corruption, and delayed or inconsistent economic reforms. As a result,

1 *National Accounts of OECD Countries*. World Bank, 2024, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD (access date here and below: 6 July 2025).

Ukraine's GDP, which was higher than Poland's in 1990, rose to only USD 178.76 billion by 2023. While the Ukrainian agricultural sector still has enormous potential – particularly due to the vast areas of fertile land – the lack of investment in infrastructure, limited modernisation, and restricted access to international markets have hindered its development. And although Ukraine signed an Association Agreement with the European Union in 2014, it did not achieve significant GDP growth as a result.

Figure 1. GDP of Poland and Ukraine in constant 2015 prices (in USD billions)

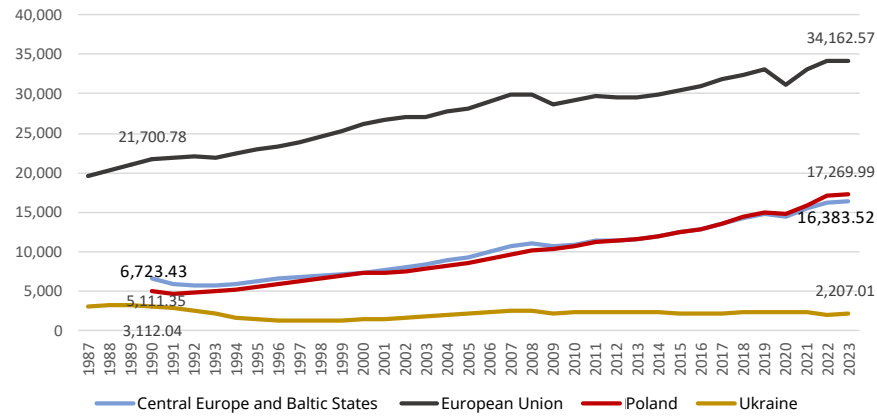


Source: *OECD National Accounts*, World Bank, 2024, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD.

Despite the comparable GDP of Ukraine and Poland in the early 1990s (Figure 1), Ukraine's GDP per capita was lower, indicating less efficient use of resources. Over time, this gap only widened. Poland consistently maintained a similar distance from the EU average and even slightly reduced it in nominal terms, while becoming increasingly integrated with European markets and institutions. Meanwhile, Ukraine, grappling with numerous internal challenges, drifted further from this goal. As a result, the current difference in GDP per capita between Poland and Ukraine is significant, with Poland's economic growth rate markedly higher. In 2023, Poland's GDP per capita was nearly eight times that of Ukraine, whereas in 1990 it was approximately 65%. The gap relative to the EU average also widened considerably: in 1990, Poland's GDP per capita was around 23% of the EU average, rising to about 50% by 2023. Ukraine, burdened by internal problems and armed conflicts,

was unable to achieve similar progress. In 1990, Ukraine's GDP per capita was 14% of the EU average, while by 2023 it had dropped to just over 6%. It is also worth noting that, compared to the countries of Central Europe and the Baltic States, Poland gradually narrowed the gap in GDP per capita and, in recent years, has overtaken them.

Figure 2. GDP *per capita* in constant 2015 prices (in USD)



Source: World Bank.

Over the same period – the past three decades – Poland managed to develop a relatively balanced agricultural and agri-food sector, which has also become an important global supplier of various products. In terms of cereal production in 2020, Poland accounted for 19.3% of global rye output (ranking second in the world with 2.9 million tonnes), 6.5% of global oat production (third worldwide with 1.7 million tonnes), and ranked sixth globally in the production of sugar beets (5.6% with 14.2 million tonnes) and rapeseed (4.1% with 3.1 million tonnes), as well as seventh in the production of potatoes (2.2% with 20.8 million tonnes). In the livestock sector, Poland ranked twelfth in cow's milk production (2.1% of global output with 14.8 million litres) and fifteenth in meat production (1.6% with 5.2 million tonnes).[2]

2 Ibid.

With the development of the Polish economy and the structural changes of the past three decades, the relative share of agriculture in GDP creation has shown a declining trend. However, this decline has occurred alongside growth in both GDP and agricultural production – in both monetary and physical terms. In 2021, **the value added by the agricultural sector (including forestry and fisheries) in Poland accounted for 2.22% of GDP**.[3] Nevertheless, the gross value added of Polish agriculture tends to fluctuate from year to year, due to the specific nature of agricultural production and its strong dependence on weather conditions, as well as market changes – particularly in agricultural product prices.[4] In 2020, with Poland's total exports amounting to EUR 239.9 billion,[5] the agri-food sector accounted for 14.3% of exports, playing an important, though not dominant, role.

In Ukraine, the contribution of agriculture to GDP hovers around 10%, making it one of the most important sectors of the national economy. The value of agricultural production has been growing alongside GDP, enabling the country to maintain relatively high levels of exports and foreign currency inflows. In 2020, the agri-food sector generated nearly 45% (EUR 19.5 billion) of Ukraine's total export-related foreign currency earnings,[6] with the share of agri-food products in total exports having increased from 10.1% in 2000.[7] This highlights not only the sector's importance for economic development but also its role in maintaining a positive foreign trade balance and supporting the relative stability of the national currency – especially in times of crisis.

3 *Statistical Yearbook of Agriculture 2022*. Statistics Poland, Warsaw 2023, https://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-statystyczny-rolnictwa-2022,6,16.html.

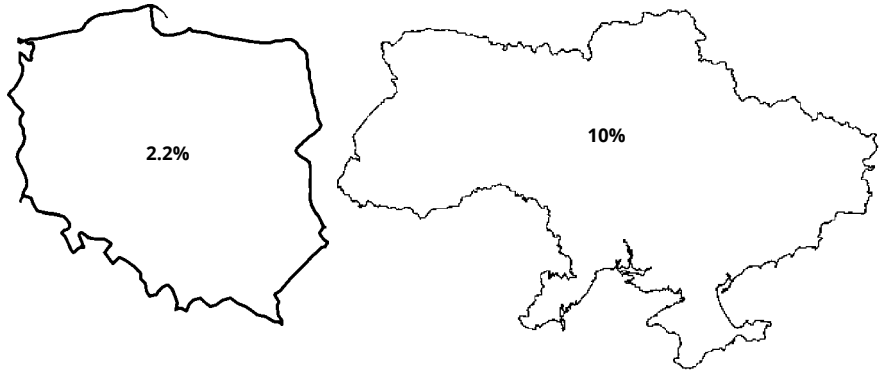
4 World Bank (2024); https://data.worldbank.org/indicator/NY.GDP.MKTP.CD.

5 *Diagnosis of the Agri-Food Sector and Rural Areas in Poland Prepared for the Purpose of Developing the Strategic Plan for the Common Agricultural Policy for 2021–2027*, August 2020 (draft). Ministry of Agriculture and Rural Development, https://www.gov.pl/attachment/5faee901-178f-4471-877d-a1132353233b.

6 *Statistical Yearbook of Foreign Trade*. Statistics Poland, Warsaw 2021, https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultaktualnosci/5515/9/15/1/rocznik_statystyczny_handlu_zagranicznego_2021_04_11.pdf.

7 *Commodity Pattern of Foreign Trade of Ukraine*, 2020. State Statistics Service of Ukraine, 2021, https://ukrstat.gov.ua/operativ/operativ2020/zd/tsztt/tsztt_u/tsztt1220_ue.xls.

Figure 3. Contribution of the agricultural sector (including forestry and fisheries) to GDP in Poland and Ukraine in 2021 (in %)



Source: World Bank.

In recent years, Ukraine has maintained a leading global position in the production and export of several key agricultural products. It ranks among the world's top five exporters of wheat and maize (fourth globally, accounting for 10% and 13%, respectively), as well as barley and rapeseed (third place, with 13% and 10%, respectively). Ukraine is also the world's largest producer of sunflower seeds, sunflower oil, and sunflower meal – and the largest global exporter of sunflower meal and oil, accounting for more than half of global supply.[8] **This production is achieved through the use of vast tracts of arable land and intensive (often environmentally harmful) farming techniques**. Despite having comparable agricultural output to Poland before Russia's full-scale invasion (EUR 27.43 billion in Ukraine vs EUR 25.86 billion in Poland in 2020), Ukraine's results were based on over 41 million hectares of farmland (compared to 14.7 million hectares in Poland) and involved around 14.5% of total employment. Raw commodities remain the foundation of Ukraine's agri-food exports, with cereals accounting for the largest share (43.6%, or EUR 8.25 billion). At the same time, in 2020 Ukraine exported only EUR 2.95 billion[9]

8 Agricultural Policy Monitoring and Evaluation 2021: Addressing the Challenges Facing Food Systems. OECD Publishing, Paris 2021, https://doi.org/10.1787/2d810e01-en.

9 Y. Zolotnytska, S. Kowalczyk, *Ukraine on the Global Agricultural Market*, Quarterly Journal of Enterprise Studies 2022, vol. 65, no. 3, pp. 5–25, https://econjournals.sgh.waw.pl/KNoP/article/view/3013/2702; A. Nowak, *Polish and Ukrainian Agriculture in Figures: A Look at Production Potential and the Efficiency of Its Use*, Pomorski Thinkletter, no. 3, 2023, https://www.kongresobywatelski.pl/wp-content/uploads/2023/11/ptl14-anna-nowak-polskie-i-ukrainskie-rolnictwo-w-liczbach.-spojrzenie-na-potencjal-produkcyjny-i-efektywnosc-jego-wykorzystania.pdf.

worth of processed food products, while Poland exported EUR 18.4 billion.[10] This highlights significant differences in the development levels of the agri-food sectors in both countries, including their contribution to value added, producer cooperation, and the advancement of food processing industries.

Ukraine's achievements in the agricultural sector have not translated into improved living conditions in rural areas.[11] **There are around 4 million individual farms in Ukraine, which operate within the informal economy.**[12] These farm operators are not covered by the national social security system – they are not part of the state pension system, are not formally employed, and do not conduct registered business activity, which means they cannot access social benefits. In contrast, **the remaining 34,500 registered family farms and 10,400 agricultural enterprises have more direct access to the market and produce for commercial purposes**, with broader development opportunities and (albeit limited) state support. However, in the past two decades, Ukraine's agricultural landscape has become increasingly dominated by large corporations – commonly referred to as agroholdings – each managing more than 100,000 hectares of land. The ten largest companies alone recently cultivated a combined 2.85 million hectares of agricultural land.[13] This polarisation, concentration, and control of land and markets by very large farms and enterprises is causing adverse structural changes within the sector. It leads to a concentration of land in the hands of a few entities, resulting in a polarised and, in extreme cases, unjust and opaque agricultural business environment. **The narrow specialisation of these corporations in a few high-profit, export-oriented crops has contributed to extreme sectoral polarisation and is typically achieved through environmentally harmful monoculture practices.**

In contrast, the structure of Polish agriculture has retained a traditional division between the crop and livestock sectors, with both contributing almost equally to the total gross value of agricultural production. In 2020, crop production accounted for 51.1% of total agricultural output, while the livestock

10 *Commodity Pattern of Foreign Trade of Ukraine*, 2020. State Statistics Service of Ukraine, 2021, https://ukrstat.gov.ua/operativ/operativ2020/zd/tsztt/tsztt_u/tsztt1220_ue.xls.

11 *Statistical Yearbook of Foreign Trade 2024*. Statistics Poland, Warsaw 2024.

12 O. Borodina, V. Krupin, *Is It Possible to Utilise the Agricultural Potential of Ukraine under the Current Agrarian System?*, EuroChoices 2018, vol. 17, no. 1, pp. 46–51, https://doi.org/10.1111/1746-692X.12151.

13 State Statistics Service of Ukraine, *Agriculture of Ukraine 2020*. Kyiv 2021, https://ukrstat.gov.ua/druk/publicat/kat_u/2021/zb/09/zb_sg_20.pdf.

sector contributed 48.9%.[14] In Ukraine, although the proportions were similar in the early 1990s, they changed drastically as a result of ineffective state policies in the 1990s and 2000s, and later – after 2010 – due to the growing influence of agroholdings. This led to the marginalisation of livestock production. As a result, the livestock sector's share of Ukraine's total agricultural output dropped to just 23.3% by 2020,[15] accompanied by a sharp decline in livestock numbers – the cattle population alone fell by around 90% between 1991 and 2020. **The only livestock segment that has expanded over the past two decades is poultry, but this growth has been driven primarily by large-scale enterprises focused on export-oriented production.**

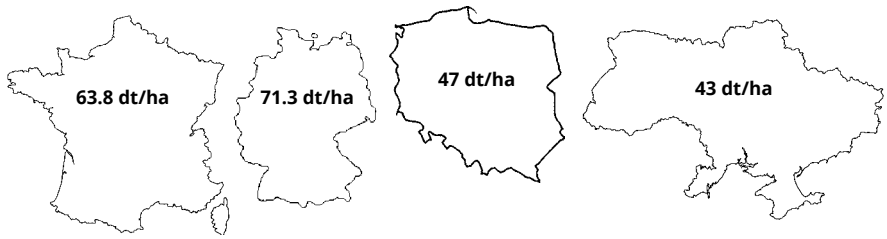
Agriculture in Poland has evolved significantly over recent decades, particularly during the economic restructuring of the 1990s and at the turn of the 21st century, when transformation and modernisation accelerated thanks to the use of EU funds. However, even today, changes and restructuring continue across all EU countries, driven in part by evolving EU policies. In terms of productivity, there remains a considerable gap between Poland and countries with more efficient agricultural sectors. For example, **the average cereal yield in Poland is 47 decitonnes per hectare, compared to 71.3 dt/ha in Germany and 63.8 dt/ha in France**. Still, productivity in Poland is improving: between 2010 and 2020, cereal yields increased by 31% (from 35.8 dt/ha). **Ukraine, in this regard, achieves an average yield of 43.0 dt/ha**, with an even greater growth of 58% during the same period. The productivity gap between Poland, Ukraine, and the most efficient EU countries also persists in the livestock sector. The average annual milk yield per cow in Poland is 6,973 kg, while in leading milk-producing EU-27 countries such as Denmark and the Netherlands it stands at 10,028 kg and 9,256 kg, respectively. In 2020, Ukraine reached a level of 5,130 kg per cow – still relatively low, but a significant improvement compared to 4,083 kg in 2010.[16]

14 *Top 10 Agriholdings According to Size of Land*. Landlord, 2019, https://landlord.ua/news/top-10-ahrokholdynhiv-za-rozmirom-zemelnoho-banku.

15 *Statistical Yearbook of Agriculture 2021*. Statistics Poland, Warsaw 2021, https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultaktualnosci/5515/6/15/1/rocznik_statystyczny_rolnictwa_2021_r.pdf (access date: 20 December 2024).

16 *Agriculture of Ukraine 2021*. State Statistics Service of Ukraine, Kyiv 2022, https://ukrstat.gov.ua/druk/publicat/kat_u/2021/zb/09/zb_sg_20.pdf.

Figure 4. Average cereal yields in selected European countries



Source: *Statistical Yearbook of Agriculture 2022*, Statistics Poland (GUS), Warsaw 2023.

The differences in the pace and direction of economic development between Poland and Ukraine are the result of multiple factors. Most importantly, Poland carried out its systemic transformation more quickly and effectively, including the privatisation of state-owned enterprises, market liberalisation, and financial system stabilisation. These reforms created more favourable conditions for entrepreneurship and investment. Moreover, Poland built stronger state institutions that supported economic growth and ensured greater transparency in public administration. A turning point for the Polish economy was its accession to the European Union, which accelerated modernisation, attracted foreign investment, and provided access to larger markets. In contrast, Ukraine faced numerous internal challenges such as corruption, political instability, incomplete economic reforms, and armed conflicts, all of which hindered economic development and reduced the effectiveness of its integration with European structures.

Why has Ukraine, despite its greater initial economic potential, failed to catch up with Poland?

- **Political instability.** Since gaining independence, Ukraine has experienced repeated political crises and unfinished reforms, which have led to economic and social imbalances and discouraged investment.
- **Corruption.** Widespread corruption has weakened public trust in state institutions, discouraged investors, distorted market mechanisms, and undermined human rights.
- **Land ownership issues.** Long-standing disputes over land ownership have hampered the development of modern agriculture. A moratorium on the sale of farmland remained in place until 2021, and the liberalisation of this market has not yet ensured the rights of all stakeholders in the agricultural sector.
- **Poor infrastructure.** Ukraine's technical infrastructure required significant investment, which has been chronically lacking. Military aggression

against Ukraine has further worsened the state of its transport and energy infrastructure.
- **Dependence on Russia.** Strong economic ties with Russia – particularly energy dependence – limited Ukraine's ability to make independent economic decisions and exposed the country to economic and political blackmail.

In contrast to Ukraine, Poland:

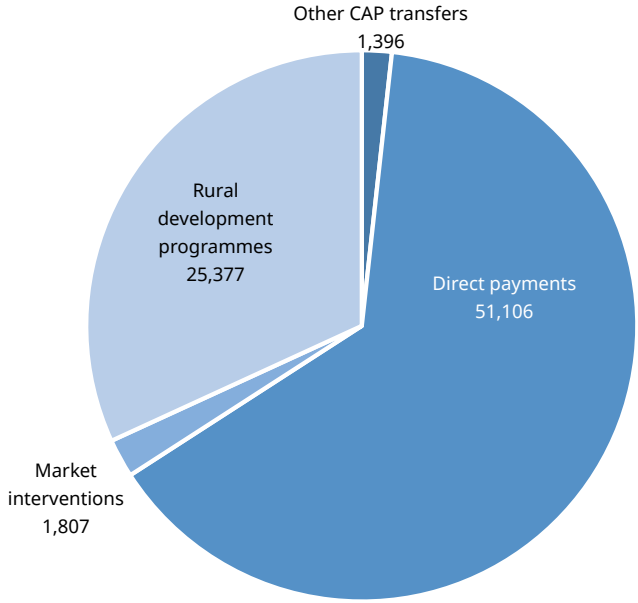
- **Carried out the privatisation of state-owned enterprises more swiftly**, which accelerated the development of the private sector.
- Was **more open to foreign investment**, contributing to the modernisation of the economy.
- **Stabilised its political system**, creating more predictable conditions for business development.
- Actively **participated in the process of integration with the European Union**, which helped align the Polish economy with European standards.

Although both Poland and Ukraine faced a similar challenge of transforming their economies, different internal and external factors led to divergent development paths. Thanks to a more stable political environment, decisive economic reforms, and openness to international cooperation, Poland has achieved greater success in transforming its agriculture and agri-food industry.

The differences in GDP levels between Poland and Ukraine are of fundamental importance for the development of agriculture in both countries and also shape their positions within the European agri-food sector. As a member of the European Union, Poland has benefited from numerous advantages associated with integration into the single market. Through investments in modern technologies, EU support, and access to more receptive markets, Polish agriculture has undergone modernisation and become more competitive. Specialisation in the production of certain goods – such as apples or poultry meat – has allowed for greater efficiency. Despite these successes, Polish agriculture still faces challenges related to the ageing of the farming population, low economic efficiency, and limited resilience to ongoing changes. Even with substantial funding from the European Union, full modernisation and improved competitiveness in the sector require further bold measures, particularly in the area of structural reform. It is worth highlighting that over 20 years of EU membership, Poland has

received EUR 80 billion under the Common Agricultural Policy, including EUR 51 billion in direct payments (as of July 2024) (see Figure 5).

Figure 5. Transfers to Poland under the Common Agricultural Policy (as of 1 July 2024; in EUR millions)



Source: Ministry of Finance.[17]

Despite its enormous potential, Ukrainian agriculture faces numerous challenges that hinder the full development of the sector. Firstly, limited integration with the European market and insufficient state support prevent the agricultural sector from reaching its full capacity. Farmers often face a lack of access to modern technologies and limited credit availability, which restricts opportunities for farm investment. Despite these difficulties, agriculture remains a vital part of Ukraine's economy, and the country is currently one of the world's key exporters of cereals and selected agricultural products.

However, the picture of Ukrainian agriculture is far from uniform. This stems from a dual system based on the coexistence of two different ownership and organisational structures. On the one hand, there are small and medium-sized individual farmers; on the other, the corporate sector – agricultural enterprises, including a unique Ukrainian phenomenon: agroholdings, which control vast areas of farmland. As emphasised by Prof. Olena Borodina from the

17 *Statistical Yearbook of Agriculture 2022*. Statistics Poland, op. cit.

Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine,[18] the individual farming sector uses 48% of agricultural land and generates 46% of total agricultural production while employing as much as 82% of those working in agriculture. Although it is often assumed that Ukrainian land is dominated by large holdings, small and medium-sized individual farms still play a key role in the country's agriculture. Despite having fewer capital resources, these farms provide a significant share of the food supply and form the backbone of the rural economy.

The corporate sector – which includes agroholdings and agricultural enterprises – controls 52% of Ukraine's agricultural land and accounts for 54% of total agricultural production, yet it employs only 18% of the agricultural workforce. Thanks to their capital resources and access to modern technologies, agroholdings are more efficient and export-oriented, but their dominance raises concerns about soil depletion and the concentration of wealth in the hands of a few entities.[19]

This dualistic approach to agriculture means that both forms – individual and corporate – coexist, but their impact on the development of the sector, local communities, and the environment differs significantly. Unfortunately, this system also leads to tensions in the development of the agricultural sector. Owing to their economic strength, agroholdings dominate the market, making it difficult for smaller farms to access land, credit, and sales markets. At the same time, individual farmers are often forced to lease their land to large corporations, which limits their opportunities for growth within the agricultural sector.

18 *Financial Transfers Between Poland and the EU Budget in Subsequent Years of Poland's Membership in the EU (2004–2020)*. Ministry of Finance, Warsaw (as of 1 July 2024), https://www.gov.pl/web/finanse/transfery-polska-ue-unia-europejska.

19 N. Mamonova, O. Borodina, B. Kuns, *Ukrainian Agriculture in Wartime: Resilience, Reforms, and Markets*, Transnational Institute, 9 November 2023, https://www.tni.org/en/article/ukrainian-agriculture-in-wartime.

Historical Context of Agricultural Transformation in Ukraine

Ukraine has a specific agricultural sector in which around 30% of total crop production and nearly half of livestock production are generated by individual (household) farms, with most of this output consumed directly rather than entering the market.[20]

In our view, the sustainable development of Ukrainian agriculture is hindered by the following key issues:

- an imbalance between agricultural enterprises, family farms, and individual household farms;
- high levels of corruption[21] resulting in impartial protection of rights, especially for small farmers and rural residents;
- control of domestic producer prices and market access by a limited number of agricultural enterprises;
- lack of effective oversight of agricultural activity in terms of its environmental impact;
- the inaccessibility of social insurance for people engaged in agricultural activities and their exclusion from benefits available to those employed in other sectors;
- insufficient development of infrastructure in rural areas, especially remote ones (roads, transport, healthcare, education, other services);
- ageing, depopulation, and migration of rural populations;
- ageing of farm owners and lack of successors;
- lack of effective cooperation among individuals and entities engaged in agriculture;
- a low number of local initiatives and a prevailing mentality of passivity among the rural population (i.e. the expectation that local problems will be solved by authorities or other actors).

20 Ibid.

21 *Agricultural Policy Monitoring and Evaluation 2021*. OECD, op. cit.

Some of the above issues (excluding points 1–5) are present in Poland to a certain extent as well, but their scope is significantly different, as in Poland they are consistently addressed through both EU and national policies.

There are several main causes that have led to these conditions. While both Poland and Ukraine share a similar history of Russian occupation (lasting several centuries) and several decades of centrally planned economies in the 20th century, there were both strong similarities and significant differences in their development during these periods. The latest changes (over the last two decades) are also significant, such as the quality of governance, consistency and gradual expansion of policies (supporting local development, agricultural development, entrepreneurship development), differences in state financial support for agriculture and farmers, the approach to the development of agricultural advisory services, availability of financial resources, the EU accession path and its accompanying support mechanisms, cooperation between farmers and actors in the agri-food sector (both horizontal and vertical), and the role and engagement of civil society.

To understand the situation of Ukrainian and Polish agriculture, it is important to consider the historical context of land ownership. This is key to understanding the contemporary structure of agriculture and the problems facing the sector in both countries. Land ownership has historically been closely linked to politics, and control over it has carried enormous economic and social importance. Although both Ukraine and Poland have experienced similar historical processes such as partitions, occupations, and regime changes, differences in social structure, agricultural policy, and the influence of individual occupying powers have led to divergent development paths in the agricultural sectors of the two countries.

After the collapse of the Soviet Union in 1991, Ukraine regained its independence, initiating fundamental changes in the land ownership system. Agricultural land was gradually privatised, state-run kolkhozes and sovkhozes were transformed into so-called collective agricultural enterprises, and their employees received shares in the form of 'pai' (parcels) – theoretical shares in land, which they could use to work collectively or withdraw and farm individually. However, the privatisation process did not proceed smoothly. Despite formal regulations, parcel owners had difficulties physically taking over and using their plots.[22]

22 *Corruption Perceptions Index 2022*. Transparency International, https://www.transparency.org/en/cpi/2022.

In 2001, a new Land Code was adopted, formally introducing private ownership of agricultural land, but simultaneously imposing a moratorium on its sale. This ban was intended to protect against land concentration in the hands of oligarchs or foreign investors. However, the moratorium was extended for nearly 20 years, limiting the development of the land market and investment opportunities.

Moreover, land was perceived less as an opportunity or asset (especially considering the impossibility of selling it), and more as a burden or a subsistence resource enabling survival through self-supplied food. Land lease agreements began to develop more actively after 2000, as more enterprising farmers found their niche in the market and sought to scale up production. However, land leasing was not properly regulated, and most such agreements were informal. This led to uncertainty for both the lessee and the lessor. Land leasing became one of the drivers of rapid farm development, as offering a stable and relatively attractive lease payment was more appealing to small-scale farmers (or landowners not engaged in farming) than the insecurity of agricultural production in an immature market environment.

By early 2006, 27.3 million hectares of agricultural land in Ukraine had been distributed among 6.9 million citizens. The average land allotment per individual was 4 hectares, though with significant regional variation – from 1.1 ha in Ivano-Frankivsk Oblast (characterised mostly by mountainous terrain) in western Ukraine to 9.3 ha in Luhansk Oblast (dominated by flatlands) in the east.[23] Despite this process, the new individual farmers lacked knowledge of market relations, and no production or logistics infrastructure was established. As a result, most of their output was produced for self-consumption or, in some cases, sold on regional organised markets (mainly in larger cities).

Lifting the moratorium on agricultural land transactions became a key political issue in 2019, when President Volodymyr Zelenskyy and his party initiated agricultural reform. In 2020, a law was adopted that introduced a free land market, initially allowing sales only to natural persons. From 2024, the law was extended to legal entities (with a purchase limit of up to 10,000 ha per entity), but with the condition that foreigners may acquire agricultural land only after a national referendum.

23 A. Bondar, B. Lilje, *Land Privatization in Ukraine*, The FIG XXII International Congress, Washington, D.C. USA, April 19–26, 2002, https://www.fig.net/resources/proceedings/fig_proceedings/fig_2002/Ts7-6/TS7_6_bondar_lilje.pdf.

The long-lasting moratorium had many consequences for the development of agriculture in Ukraine. On the one hand, it facilitated the concentration of land within large agroholdings, which were able to lease vast areas. On the other hand, it limited opportunities for smaller farms to make long-term investments in land development. The process of privatisation and changes in land ownership structure still raise social concerns, particularly fears that land may be taken over by oligarchs or foreign investors, which for many Ukrainians recalls the difficult experiences of industrial privatisation in the 1990s. Due to significant inequality in Ukraine's agricultural sector – where individual farmers compete for land with large agricultural enterprises and agroholdings – the lifting of the moratorium on land sales cannot be considered to have been implemented properly. Individual farmers who lack sufficient financial resources to buy land are at a disadvantage. They lack support that would allow them to compete on equal footing and promote sustainable development in the agricultural sector.

In Poland, as in Ukraine, forced collectivisation was introduced, but the process progressed more slowly, faced greater resistance from peasants, and was virtually abandoned after 1956. After 1989, agriculture was privatised, though the process was more complex than in Ukraine due to greater diversity in ownership forms and a more fragmented farm structure.

The year 1989 brought market reforms and led to the bankruptcy of some small farmers, but it also allowed many of them to take advantage of the newly available farmland from the transformation of state-owned PGRs. **A long-standing tradition of farming, inherited knowledge and experience, as well as an enduring relationship to the land, played a crucial role. This may be one of the key differences between Poland and Ukraine – in how land is perceived by farmers and in the motivation to maintain agricultural activity.** Since 1992, the EU's Common Agricultural Policy has shifted from market support to income support for farmers. Poland's accession to the European Union in 2004 enabled it to adopt this approach and help farmers – especially smallholders – to continue agricultural production in the sector.

The situation in Ukraine is different. **Contemporary Ukrainian agriculture, dominated by agroholdings and large enterprises, has its roots in the collective system, while the sector of individual farmers serves as a counterbalance to this dominance.** These two structures – individual and corporate – have developed in parallel, a result of both historical changes and recent reforms. However, this development cannot be considered complementary, as the excessive financial power of agroholdings leads to market abuses.

To support Ukraine in the EU accession process, attention must be focused on several key issues: above all, it is essential to ensure fair access to agricultural resources for all stakeholders, including individual farms, which currently have limited rights and opportunities. It is also important that integration with the EU maintains balance within the Union's agricultural structure, focusing on both increased productivity and sectoral resilience. This process should promote sustainable, environmentally friendly practices and support rural development to ensure long-term agricultural growth throughout the European Union.

Potential of Polish and Ukrainian Agriculture

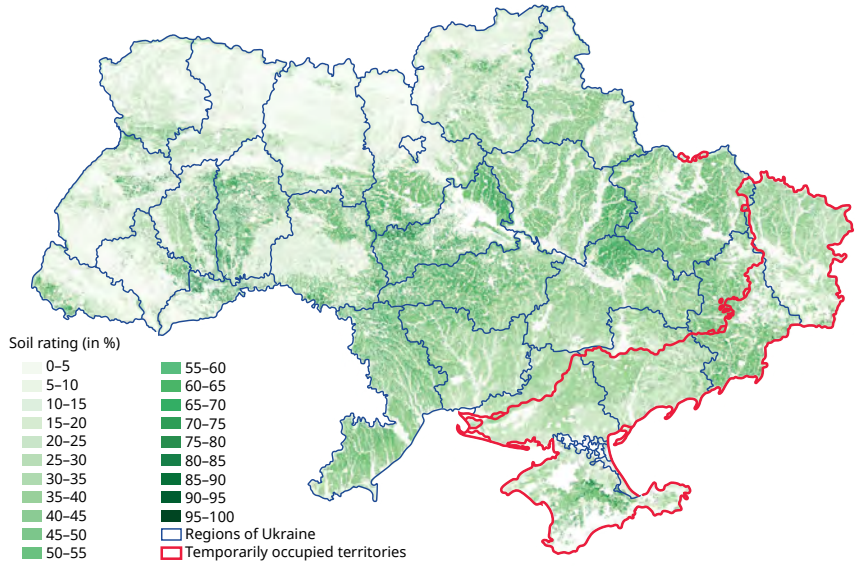
Ukraine's agricultural potential is considerable and stems from several key factors.[24] First, the country possesses some of the most fertile soils in the world – so-called **chernozems – which cover 34 million hectares,**[25] **or approximately 4.7% of the world's reserves of this soil type**. On the scale of Ukraine, chernozem constitutes about 56.6% (taking into account the country's territory before the Russian invasion in 2014). Chernozem is characterised by a high humus content and exceptional agricultural properties, allowing for efficient cultivation of economically significant crops such as wheat, maize, sunflower, and soy. This makes Ukraine one of the world's key grain exporters, underlining its strategic importance in global food trade. The correlation between the quality of Ukraine's soils and the land rating system used in the country (Figure 6) confirms the prevalence of soils with high suitability for agricultural production.

As a **country with low population density in rural areas**, Ukraine has the distinct advantage of vast tracts of land available for agricultural use. A small number of inhabitants in farming regions means fewer conflicts over land use for other purposes, allowing for large-scale agricultural intensification. Compared to countries with higher population density, where agricultural land competes with residential or industrial development, Ukraine has a comparative advantage in the development of large-scale farms. This supports not only intensive agricultural production but also the creation of agricultural holdings that can more systematically utilise available resources.

24 The analysis of potential draws on the study: W. Czubak, S. Kalinowski, *Agrarian Structures in the EU and Ukraine*, 2024; internal materials prepared for the Centre for Social and Economic Analysis (CASE) as part of the project *Polish and Ukrainian Agriculture in a Common Europe*.

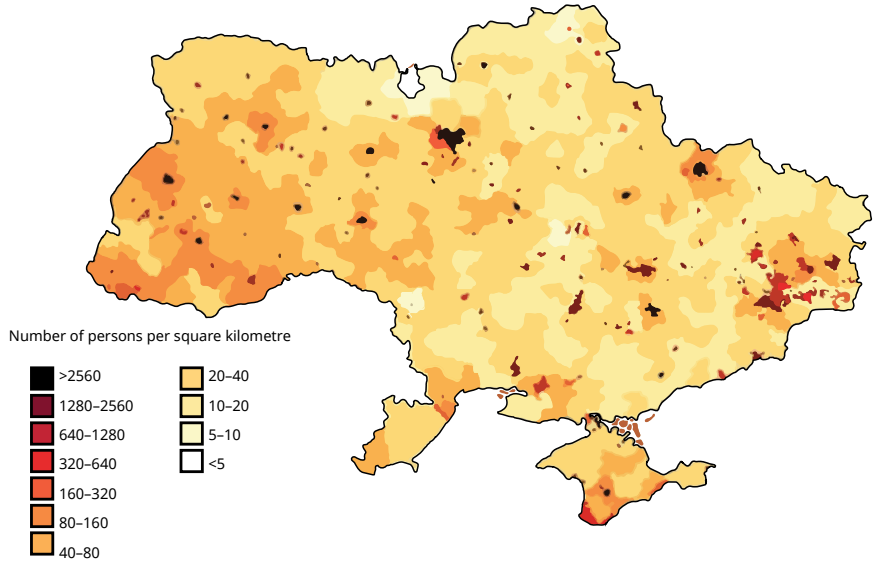
25 FAO, *Global Status of Black Soils*. Rome: Food and Agriculture Organization of the United Nations, 2022, https://doi.org/10.4060/cc3124en.

Figure 6. Soil rating in Ukraine, including the borders of Russian-occupied territories (as of the end of September 2024)



Source: prepared by Shamil Ibatullin, Land Management Institute of the National Academy of Agrarian Sciences of Ukraine, http://landukraine.com.ua.

Figure 7. Population density in Ukraine in 2020 (in persons/km²)



Source: State Statistics Service of Ukraine, citypopulation.de, estimates as of 2020.

Ukraine boasts an exceptionally favourable geographical location, enabling the development of an export-oriented sector. Before the war and the damage caused by military attacks, the country had a well-developed port infrastructure on the Black Sea, particularly in ports such as Odesa, Chornomorsk, and Mariupol, which handled the majority of agri-food exports. Proximity to Europe allowed easy access to EU markets by sea and land, and rail and road connections enabled exports to Central and Eastern Europe. This allowed Ukraine to rapidly transport agricultural products to European markets as well as to the Middle East and Asia, particularly to Turkey, Egypt, China, and North African countries. The Danube also played an important role as an alternative goods transport route to Europe. Exports to the Mediterranean region passed through the Bosporus and Dardanelles Straits, making stable relations with Turkey a key factor in trade logistics.

Following the Russian invasion of Ukraine in 2022, access to key Black Sea ports was largely restricted or blocked, significantly hindering the export of Ukrainian agricultural products. The blockade of key ports cut Ukraine off from its main maritime export routes and forced the country to seek alternative transport routes, which contributed to an increased role for land-based exports. Goods are transported by rail and trucks through the borders with Poland, Slovakia, Hungary, and Romania, but the capacity of these routes is limited, resulting in long queues at border crossings and increased transport costs. This form of transport also generates numerous conflicts.[26]

Following the Russian invasion of Ukraine in 2022, access to key Black Sea ports was largely restricted or blocked, significantly hindering the export of Ukrainian agricultural products.

Another alternative has been Romanian ports on the Danube, such as those in Galați and Constanța, from which goods can be shipped by water to international markets. Additionally, Ukraine has begun using Baltic ports, such as Gdańsk and Gdynia, though these routes are more time-consuming and less efficient compared to Black Sea routes.[27] The reduced capacity of port and rail infrastructure – resulting from war-related damage – has limited Ukraine's

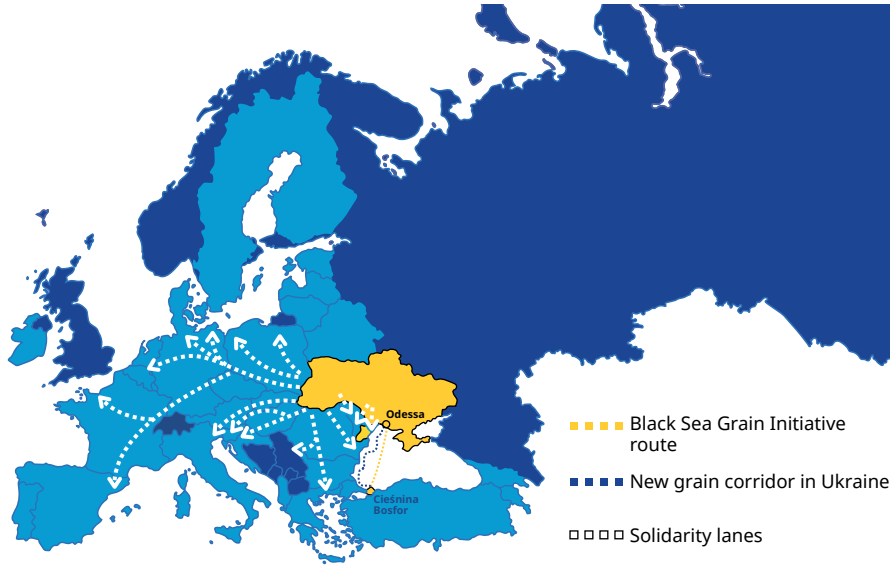
26 W. Czubak, S. Kalinowski, B. Pepliński, *Grain of Discord: An Analysis of Farmers' Protests*. Institute of Public Finance, Warsaw 2024, https://www.ifp.org.pl/wp-content/uploads/2024/03/IFP_raport_Ziarno_niezgody-analiza_protestow_rolicznych.pdf (access date: 18 November 2024).

27 N. Berman, M. Ferragamo, S. Baumgartner, *How Ukraine Overcame Russia's Grain Blockade*, Council on Foreign Relations, 27 February 2024, https://www.cfr.org/article/how-ukraine-overcame-russias-grain-blockade (access date: 5 November 2024).

export capabilities by about 40%, forcing the storage of part of the grain harvest, which increases the risk of spoilage. Transport risks in the Black Sea, such as maritime attacks and mines, deter carriers, further complicating the situation. Despite attempts to establish humanitarian corridors for grain exports, their instability makes regular deliveries difficult.[28]

Since autumn 2023, Ukraine has maintained a stable maritime export corridor, through which more than 85–90% of agri-food exports passed in 2024 and the first half of 2025. However, the problem is no longer access to ports, but climate-related factors – mainly drought and declining yields. In 2024, grain production dropped by about 15%, and further declines are expected in 2025. Current KSE and FAO data illustrate that crop yields, rather than transport, are currently the key constraint on Ukrainian agriculture.

Figure 8. Potential export routes for agri-food products from Ukraine



Source: own elaboration

However, despite its enormous potential, **Ukrainian agriculture also faces many threats that may hinder its development. One of the key challenges**

28 *Ukraine: Note on the Impact of the War on Food Security in Ukraine*. FAO, 25 March 2022, Rome, https://doi.org/10.4060/cb9171en. H. Cherevko, *Challenges for Ukrainian Agriculture During the War and Directions for Its Development, Annals PAAAE* 2024, vol. XXVI, no. 1, pp. 43–55, https://doi.org/10.5604/01.3001.0054.2828. D. Culverwell, *Is Ukraine's New Black Sea Corridor Working? Experts Say It Has Potential*, The Kyiv Independent, 28 October 2023, https://kyivindependent.com/is-ukraines-new-black-sea-corridor-working-experts-say-it-has-potential.

is underinvestment in the agricultural sector, particularly in infrastructure and technology. Smaller farmers often have limited access to modern agricultural technologies, credit, and the resources needed to increase production efficiency.

Another risk resulting from the opening of the land market in Ukraine is the concentration of land in the hands of a few entities. Agroholdings, which already control significant areas of agricultural land, can, thanks to their financial strength, purchase even more land, increasing the risk of further concentration. This phenomenon leads to growing exclusion of smaller farms, which are unable to compete with powerful corporations, contributing to the further weakening of the social structure in rural areas.

The structure of Ukrainian farms differs from that of the European Union. **In the EU in 2020, 93% of the 9.1 million farms were small family farms with an average area of 11 ha, while larger non-family farms recorded an average of 102 ha.** In Ukraine, agricultural enterprises dominate, producing most of the cereals and oilseeds for export, while smaller farmers focus on fruit and vegetables for the domestic market. In 2020, Ukraine was home to 8,600 medium-sized farms (200–2,000 ha), which produced over 50% of the grain.[29] Moreover, there is significant land concentration among agricultural enterprises and agroholdings. In 2023, each of the 118 enterprises and agroholdings managed over 10,000 ha. The largest among them, Kernel, cultivated 363,000 ha, and in 2022 it controlled 506,000 ha. The largest companies together farm nearly 6.5 million ha. Additionally, more than 10 foreign entities from the Top 100 landowners ranking operate in Ukraine. They control about 3–4 million ha of agricultural land. The largest foreign agricultural enterprises in the country are the American company Agroprosperis (300,000 ha) and the Saudi Arabian-owned Continental Farmers Group (195,000 ha).

29 A. Román, *Ukrainian Agriculture – From Russian Invasion to EU Integration*, European Parliamentary Research Service, 2024.

Table 1. Concentration of agricultural land among the 20 largest agroholdings in Ukraine (2023)

No.	Holding name	Area in thousand ha	No.	Holding name	Area in thousand ha
1.	Kernel	363	11.	Agroton	110
2.	MHP	362	12.	Ukrprominvest--Agro	108
3.	Ukrlandfarming	310	13.	A*grain	100
4.	Agroprosperis	300	14.	Vitagro	85
5.	Astarta-Kyiv	212	15.	Priwat-AgroHolding	85
6.	Continental Farmers Group	195	16.	TAS Agro	83
7.	Epicentr Agro	160	17.	Svitanok	80
8.	Agrarny Sistemi Technologii	150	18.	LNZ	80
9.	HarvEast	127	19.	Feed compound plant in Krolevets	80
10.	IMK	120	20.	Agrovista	75

Source: Latifundist.com.

Ukraine lacks a unified definition of family farming, which leads to discrepancies in data on the number and size of such farms. According to the Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine, there are 31,800 registered family farms and 3.9 million rural households, though the actual number may be higher. Family farms have an average area of 50–100 ha, which is larger than the EU average of 17.4 ha. They cultivate 15% of arable land and account for 8.7% of agricultural production, while rural households produce 37.4% of national agricultural output and cultivate 30% of land. Family farmers and rural households provide most of Ukraine's

potatoes, vegetables, fruits, milk, and meat, using more sustainable production methods.[30]

For EU countries, including Poland, the growing competitiveness of Ukrainian agriculture may pose a significant challenge. Ukrainian agri-food products, produced at lower production costs, may exert downward pressure on EU product prices, potentially reducing the incomes of European farmers. The agricultural sector within the Union, especially in countries with higher labour costs and production standards, may struggle to remain competitive without government and EU support.

Another threat is **Ukraine's political and geopolitical instability**. The ongoing conflict with Russia and uncertainty over further political reforms may weaken foreign investor confidence and slow the development of agricultural infrastructure, which is crucial for fully harnessing land potential and exports. This causes direct destruction in agricultural regions, such as the devastation of crop fields, farm infrastructure, and the loss of livestock, negatively impacting production capacity and total agricultural output. Supply chain disruptions caused by damaged transport infrastructure hinder the movement of agricultural products, leading to increased transportation costs and crop losses. Additionally, the rising war risk increases insurance costs, placing further strain on farmers.

Part of Ukraine's land remains under occupation. According to 2024 data, **around 20% of Ukraine's territory, including areas of Donbas and Crimea, is controlled by Russia**. This significantly limits agricultural opportunities in these regions, which were once key for grain and crop production. Although these lands have high agricultural potential, they are now inaccessible to Ukrainian farmers and investors, reducing Ukraine's overall capacity to increase agricultural productivity and competitiveness on international markets.

30 A. Román, *Ukrainian Agriculture – From Russian Invasion to EU Integration*, European Parliamentary Research Service, 2024.

Figure 9. Military situation (as of 9 September 2024)

Source: *Russian invasion of Ukraine*, https://en.wikipedia.org/wiki/Russian_invasion_of_Ukraine#/media/File:2022_Russian_invasion_of_Ukraine.svg.

Regional Climatic and Soil Conditions of Agricultural Production

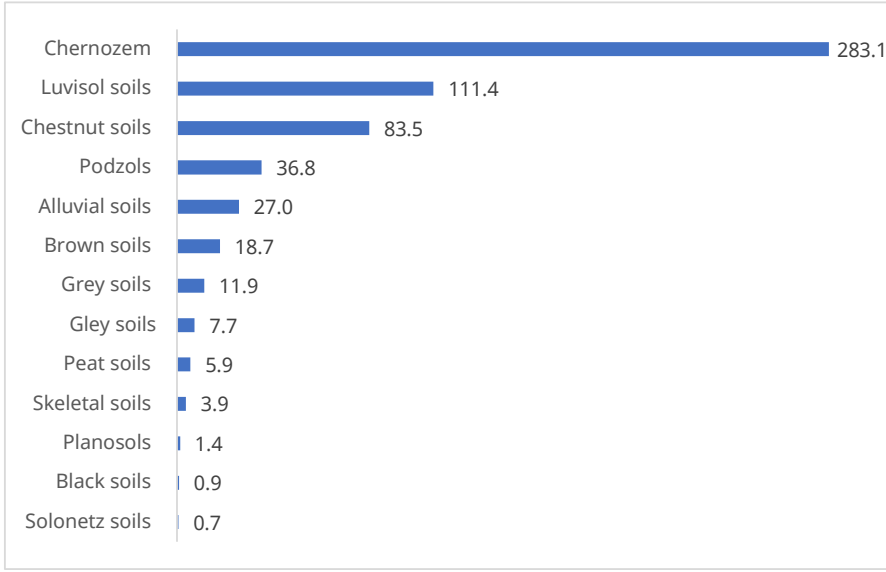
Ukraine, rightly called the "breadbasket of Europe", owes its agricultural strength primarily to its extremely fertile soils. Chernozem is a true natural treasure. It was formed as a result of a long process of humification of organic matter in steppe conditions, leading to exceptionally high humus content (up to 1 metre deep).[31] This organic substance makes the soil very loose, water-permeable, and rich in nutrients essential for plant growth. Thanks to these properties, chernozems are ideal for growing a wide range of crops – from grains such as wheat and maize to oilseed crops such as sunflower and rapeseed.

In addition to chernozem, chestnut soils (about 14% of the area) also play an important role in Ukrainian agriculture. While slightly less fertile than chernozems, they still have high humus content and are well-suited for many crops. **Chernozems and chestnut soils together occupy nearly two-thirds of Ukraine's territory, forming a vast agricultural area with exceptionally high production potential.** It is worth noting that both chernozem and chestnut soils are quite deep, meaning they have high water retention and are less prone to drought.

The diversity of Ukraine's geographic and climatic conditions means that other soil types occur in addition to chernozems and chestnut soils. Alluvial soils (about 4.5% of the area), formed in large river valleys, are also very fertile due to the regular deposition of fresh sediments. **Luvisols (about 19%) are somewhat less fertile but still suitable for many crops.** Podzolic soils (about 6% of the area), poor in nutrients, occur mainly in sandy areas and are less agriculturally useful. Although the latter two soil types occupy a smaller share of Ukraine's total land area, they play an important role in shaping the country's biodiversity.

31 N. Mamonova, O. Borodina, B. Kuns, *Ukrainian Agriculture in Wartime*, op. cit.

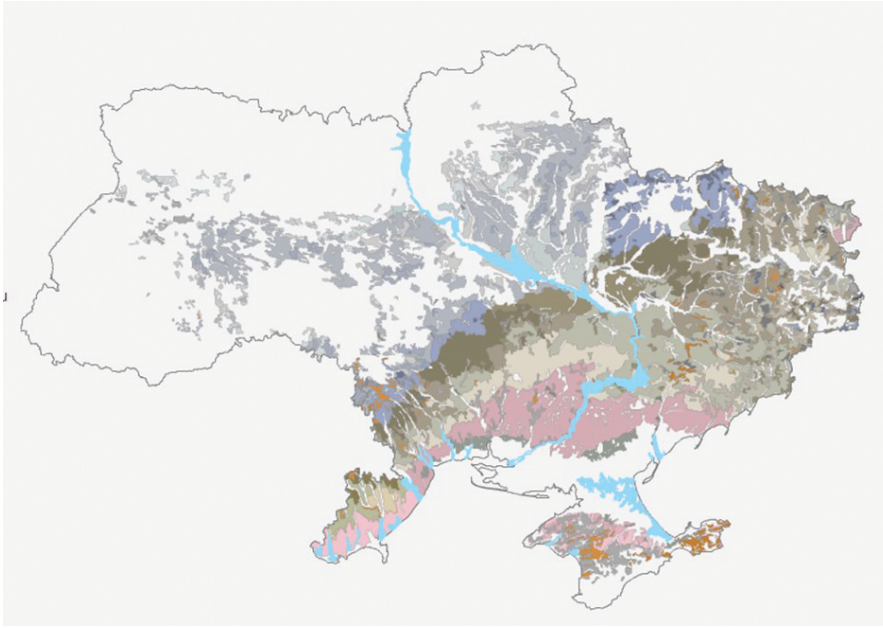
Figure 10. Area of different soil types in Ukraine (in thousand km²)



Source: Matuszczak, S. (2021). op. cit.

Chernozem soils are particularly widespread in the central, eastern, and southern parts of the country, where the climate is favourable for agriculture. These soils are not only productive but also resistant to erosion, which supports long-term agricultural use. However, due to intensive exploitation, insufficient environmental protection, and the impact of warfare, Ukraine's soils may undergo degradation, which poses a challenge for the future of agriculture. In order to preserve their productivity, sustainable soil management is essential, including appropriate crop rotation, erosion control, and rational fertiliser use.

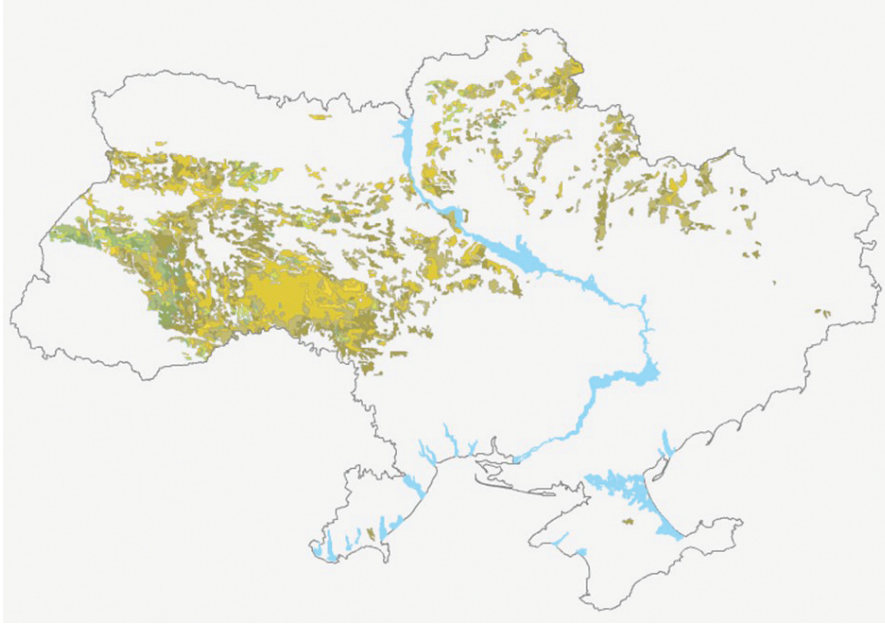
Figure 11. Area of Ukraine with differentiation of chernozem types



Source: SuperAgronom (2024), *Soil map of Ukraine*, https://superagronom.com/karty/karta-grunt-iv-ukrainy#close.

Luvisols in Ukraine are typical forest soils most commonly found in uplands, foothills, and some lowland areas. They are characterised by relatively low humus content, which gives them a lighter colour compared to fertile chernozems. They form in a temperate climate where soil formation processes result in lower organic matter accumulation. Luvisols cover about 19% of Ukraine's area and are less fertile than chernozems due to lower humus content, nutrient leaching, and often higher acidity. Nevertheless, they are used in agriculture, although they require higher fertiliser input and specialised agronomic practices. They are also frequently used as meadows and pastures.

Figure 12. Area of Ukraine with differentiation of luvisol soils



Source: SuperAgronom (2024), *Soil map of Ukraine*, https://superagronom.com/karty/karta-grunt-iv-ukrainy#close.

Ukraine's soil wealth is an invaluable natural resource that has shaped the country's agriculture for centuries. However, intensive cultivation, water and wind erosion, and climate change pose serious threats to these valuable resources. Declining humus content, structural degradation, and pollution are just some of the problems Ukrainian agriculture faces. This is why it is so important to implement sustainable farming practices such as organic fertilisation, cover crops, and minimal tillage techniques.

Thanks to its fertile soils, Ukraine is one of the world's largest food producers. The production of cereals, oilseeds, and other crops forms the backbone of Ukraine's economy. Exporting these products provides the country with significant revenue and strengthens its position on the global market. However, to maintain this potential, rational soil resource management and continuous investment in agricultural development are essential.

Compared to Ukrainian soils, **Polish soils are decidedly poorer in quality, which directly affects agricultural productivity and crop yields**. Most Polish soils are zonal soils (78% of soil cover), of which brown and luvisol soils make up 52%, and are considered medium quality. Another 26% are podzolic soils, which are poor. In Poland, about 60% of land is suitable for agricultural

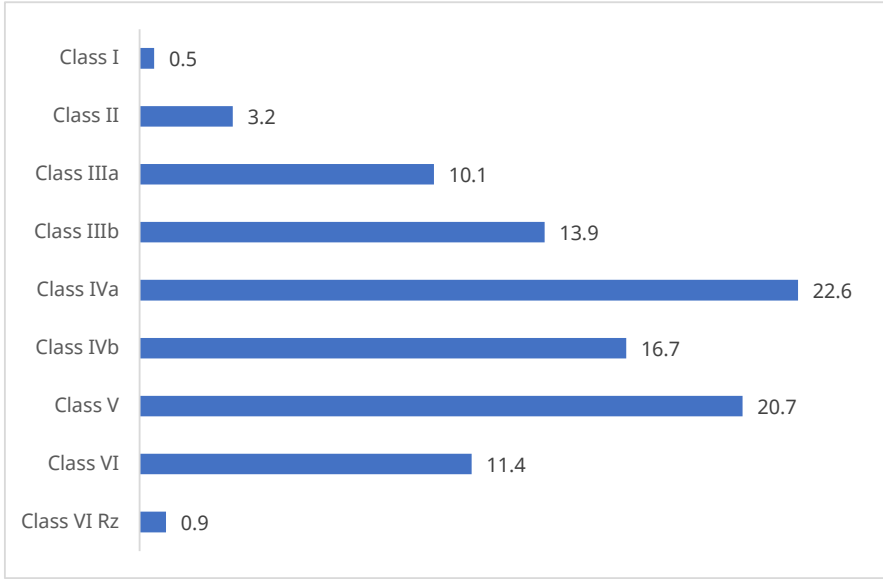
use, but only a small part – chernozems and alluvial soils – ensures high fertility, limiting the potential of Polish agriculture.

Polish soils are classified by agricultural utility, allowing the distinction of seven quality classes that vary significantly in fertility and suitability for cultivation. Class I soils, covering just 0.5% of land, are the most fertile and valuable. These include chernozems, alluvial soils, and brown soils formed on loess, mostly found in the Lublin Upland and river valleys. These areas offer exceptionally favourable conditions for growing demanding crops like wheat, sugar beets, or rapeseed, which supports intensive agriculture.

The subsequent classes include progressively lower-quality soils. Class II (3.2%) consists of very good soils, including the best brown and luvisol soils, which, though less fertile than chernozems, still offer high agricultural output. Soils in classes IIIa (10.1%) and IIIb (13.9%) are good and moderately good, suitable for most crops, though their productivity may be limited by local conditions such as moisture or mineral composition. Medium-quality soils dominate land resources (Class IVa – 23%, Class IVb – 17%), and their agricultural use requires more intensive agrotechnics. Compared to the best-quality soils, Poland has relatively more of the weakest soils – Class V and VI – whose use is limited to low-demand crops such as rye or potatoes. These soils account for over 30% of land and indicate a high share of poor-quality soils in Poland. These include podzolic and rusty soils, which are usually acidic, infertile, and difficult to cultivate. In many cases, they are suitable only for afforestation or extensive farming. This group also includes initial and mountain soils, which have minimal agricultural value due to difficult topographical and climatic conditions. This clear differentiation in soil quality significantly influences the distribution of crops and the possibility of agricultural intensification across Polish regions. As a result, farming in areas with better soil classes is more focused on high productivity, greater intensity, and efficiency, although the use of this natural potential depends on many other factors, including land structure, historically shaped agricultural culture, or agribusiness development.

Soils in the European Union are highly diverse in terms of quality and types, due to different geographical, climatic, and historical soil formation conditions in various regions. In Western and Southern European countries such as France, Spain, or Italy, more fertile soils dominate – including chernozems and alluvial soils – which provide a strong foundation for intensive agriculture. These regions often grow high-demand crops such as vines, olives, or wheat, supporting high-yield farming.

Figure 13. Arable land quality classes in Poland (in %)



Source: https://geografia24.pl/gleby-w-polsce.

By contrast, Central and Eastern Europe, including Poland, the Czech Republic, Hungary, and the Baltic States, is characterised by a prevalence of brown and luvisol soils with medium or low fertility. In these regions, more advanced agricultural techniques such as fertilisation and drainage are necessary to achieve satisfactory yields. A significant portion of soils in Europe – especially in northern and mountainous regions – is of lower quality, such as podzolic, rusty, or mountain soils, which are difficult to cultivate and often used mainly for forests, pastures, or left fallow.

Compared to other EU countries, Poland features poorer soil conditions than states with more fertile lands, such as France, Hungary, or Romania, where chernozems make up a larger share of agricultural land. However, Ukraine boasts even better soils, putting it in a privileged position in terms of agriculture. The diversity of soil quality across the EU greatly impacts the variability in agricultural production and agrotechnical requirements in different Member States.

Current State of Polish and Ukrainian Agriculture and Agri-food Processing in the Context of the European Union

Land resources and farm structure

The potential of Ukrainian agriculture is defined by the quality and quantity of land used for agricultural purposes, the structure of land use, and agrarian concentration. Favourable resource and natural conditions make agriculture a significant component of Ukraine's economy. The land resources and their quality mean that agriculture is a very important sector of Ukraine's economy. In 2021, agriculture accounted for 10.9% of Ukraine's GDP.[32] **In selected sectors such as grains or sunflower oil, Ukraine is one of the key global exporters.** At the same time, it should be remembered that supplies of these products from Ukraine constitute a considerable part of food provision in countries importing Ukrainian raw materials, including grains that are essential to food security.

Discussing agricultural potential must begin with land. Of course, purposeful use of land by humans requires labour and capital, but land is the fundamental factor of agricultural production. As already mentioned, Ukraine possesses some of the most fertile soils in the world – chernozems, which account for about 5% of the world's reserves of these soils.

Beyond soil quality, Ukraine has a vast area, including agricultural land (Table 2). The total area of Ukraine is twice that of Poland and accounts for 1⁄7 of the EU's total area. While in Poland, agricultural land (AL) resources amount to 18.6 million ha (based on cadastral data; 14.6 million ha based on usage), Ukrainian agriculture uses 41.3 million ha of AL – meaning **agricultural land constitutes over two-thirds of Ukraine's total area. For comparison: the area used agriculturally in Ukraine is 2.2 times larger than in Poland and**

32 S. Matuszak, *Breadbasket of the World? The Development of Agriculture in Ukraine*, Centre for Eastern Studies (OSW), Warsaw 2021, https://www.osw.waw.pl/sites/default/files/Raport-OSW_Spichlerz-swiata_net.pdf.

constitutes as much as 22% of the EU's total. In relative terms – the area per person – in the EU and in Poland represents about 0.25 ha, whereas in Ukraine it covers 0.85 ha. Three times more land per person means that it is easier to meet internal demand and the country boasts a much greater potential and capacity for export-oriented production. In all three regions compared, arable land dominates the structure of AL, but in Ukraine it represents more than half of the country's area. The high soil quality makes agricultural use more justified than forest maintenance. Therefore, Ukraine's forest cover is significantly lower than in Poland or the European Union.

Table 2. Cadastral area by type (in thousand ha and in %)

Item	EU		Poland		Ukraine	
	in thousand ha	%	in thousand ha	%	in thousand ha	%
Total area (official/ cadastral)	431,289	100.0	31,393	100.0	60,350	100.0
Agricultural land (official data)	184,253	42.7	18,647	59.4	41,311	68.5
of which arable land	153,861	35.7	13,475	42.9	32,541	53.9
Forest land	148,442	34.4	9,512	30.3	10,682	17.7
Land under water	21,317	4.9	766	2.4	2,414	4.0
Built-up and urbanised land	25,403	5.9	1,826	5.8	3,742	6.2
Barren land	36,619	8.5	465	1.5	2,173	3.6

Source: *Agricultural Census 2020. Report on results*, Statistics Poland (GUS), Warsaw 2021; Statistical Yearbooks of Agriculture, GUS, Warsaw 2003; Eurostat (https://ec.europa.eu/eurostat/).

As mentioned earlier, **arable land dominates the structure of AL by type of land use** (Table 3): **62% in the EU, 73% in Poland, and almost 80% in Ukraine**. When comparing Ukraine with Poland and the EU, Ukraine's structure is closer to that of Poland than to the 27 EU countries. In Ukraine, only 18% of AL consists of meadows and pastures. As in the case of forest designation, this is justified because, from both economic and social perspectives, the best-quality

land should be used to produce agricultural commodities that require good soil conditions. In this sense, intensive arable use of agricultural land is justified, considering soil quality and excellent conditions for agricultural operations. This, however, comes at the expense of permanent grasslands and therefore will result in significantly lower livestock production from ruminants, mainly beef and dairy.

Table 3. Agricultural land by type (in thousand ha)

Item	EU	Poland	Ukraine (2020)
Agricultural land including:	157,695	14,952.9	41,310.9
land under crops	97,206	10,961.8	32,757.3
fallow land	2,003	187.8	166.7
permanent crops	11,062	380.1	852.7
permanent meadows	47,424	2,788.1	2,283.9
permanent pastures		414.7	5,250.3

Source: *Agriculture of Ukraine 2022*, State Statistics Service of Ukraine, Kyiv 2023; *Statistical Yearbook of Agriculture*, Statistics Poland (GUS), Warsaw 2023; Eurostat. (https://ec.europa.eu/eurostat).

Analysis of land resources in Ukraine, particularly the ownership structure, is complicated due to the imprecise and ambiguous definition of a farm. As pointed out by Yulia Zolotnytska and Stanisław Kowalczyk,[33] the agricultural sector in Ukraine consists of various organisational and legal forms. The most important are agricultural enterprises and farming households, but there are also business associations, production cooperatives, and individual farms. An agricultural enterprise is defined as one with legal personality operating as a voluntary association. A farming household is also registered as a natural person or legal entity and therefore has entrepreneur status, producing agricultural goods for the market. An individual farm may be run by one or several related persons, without the obligation to register or keep accounting records.

33 A. Román, *Ukrainian Agriculture*, op. cit.

It is important to note that **in Ukrainian official statistics, data on agricultural enterprises and farming households are combined in one group of legal entities, while individual farms are analysed separately.** In our approach, we follow the classification of the Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine, which includes farming households – often also of a family type and with a relatively medium size (100–500 ha, in some cases several thousand ha) – in the individual sector (not the corporate one). At the same time, due to various methods of statistical data aggregation, individual parts of the analysis may differ slightly in this regard.

Thus, **agricultural enterprises together with farming households cultivate 20.3 million ha of agricultural land, which accounts for half of Ukraine's total AL.** As already mentioned, agricultural enterprises focus on producing bulk grain and oilseed crops for export, while smaller farmers focus on more intensive (also more labour-intensive) production such as fruit and vegetables for the domestic market or animal husbandry. In general, the size structure of farms in Ukraine differs significantly from that in the European Union – and even more so from that in Poland. In 2020, Ukraine had 8,600 medium-sized entities (with an area of 200–2,000 ha), producing over 50% of its grain.[34]

Thus, the dual nature of Ukrainian agriculture[35] is formed by **individual farms** and **farming households**, which cultivate 48% of agricultural land, produce 46% of agricultural output, and employ 82% of people working in agriculture. These farms play an important role in the entire sector. They account for almost all of the domestic supply of potatoes, 90% of vegetables, 80% of milk, and three-quarters of beef production.[36] The lack of a unified definition of family farming leads to data discrepancies, and sources that report on the number and size of farms differ significantly. According to the Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine, there are 31,800 registered farming households and 3.9 million individual farms. Farming households cultivate 15% of arable land and are responsible for 8.7% of agricultural production, while individual farms produce 37.4% of national agricultural output and cultivate 30% of land. Both farming households and

34 Y. Zolotnytska, S. Kowalczyk, *Ukraine on the Global Agricultural Market*, op. cit.

35 A. Román, *Ukrainian Agriculture – From Russian Invasion to EU Integration*, op. cit.

36 M. Keyzer et al., *Farming and Rural Development in Ukraine: Making Dualisation Work*, JRS Scientific and Policy Reports, Luxembourg 2013, Publications Office of the European Union.

individual farms rely more heavily on labour than capital and apply more sustainable production methods.[37]

Given the dual nature of Ukrainian agriculture, it should be noted that the agricultural sector in the European Union is not homogeneous either, although numerically and in terms of land use, individual farms dominate – or more precisely, the model of the family farm. From the outset of the EU's Common Agricultural Policy, family farming has been the main target group for financial support.[38] Although family farms are the basic model of European agriculture, there is no single definition of the term. In fact, many definitions coexist across all Member States – used for scientific research, agricultural policy, or by NGOs. The concept of a family farm also appears in the Constitution of the Republic of Poland (1997), which states that such farms are the foundation of the country's agricultural system. However, the Constitution does not explain the term, which is instead defined in the Law on Shaping the Agricultural System. Based on the form of legal ownership, individual farms have the smallest shares in France (70%), Czechia (87%), as well as Finland and Belgium (90% each). In the remaining EU countries, more than 90% of farms are owned by individuals – and in Greece, Ireland, Lithuania, Poland, Romania, and Slovenia, the share reaches over 99%.[39]

In 2020, the EU had around 9 million farms, 93% of which were classified as family farms, with an average area of 11 ha. Farms with a legal status other than an individual family farm account for only 7% of farms in the EU, but their relative size is much larger – with an average area of around 100 ha. In Poland, 99% of farms are individual. Almost half of all EU farms are in Romania and Poland – adding Italy brings the total to 58%.

The competitiveness of the agricultural sector depends on many factors. One of them is the use of economies of scale in farms that dominate commercial production. Agrarian concentration is a measure that to some extent reflects the ability to utilise land potential. It shows the distribution of agricultural land among entities by size – usually by area of AL. Compared to Ukraine, the situation in Poland and the EU (Table 4) reveals incomparably higher fragmentation. In EU countries, three-quarters of all farms are smaller than 10 ha

37 F. Mouseau, E. Devilers, *War and Theft: The Takeover of Ukraine's Agricultural Land*, The Oakland Institute, 2023, https://www.oaklandinstitute.org/sites/default/files/files-archive/takeover-ukraine-agricultural-land.pdf.

38 N. Mamonova, O. Borodina, B. Kuns, *Ukrainian Agriculture in Wartime: Resilience, Reforms, and Markets*, op. cit.

39 R. Fennell, *The Common Agricultural Policy: Continuity and Change*, Oxford: Oxford Academic, 2023, https://doi.org/10.1093/oso/9780198288572.001.0001.

In Poland, 99% of farms are individual.

and about 85% are below 20 ha. Consequently, only a small share of farms exceeds 50 ha. This fact alone does not cause dysfunction in the sector – however, the proportion of agricultural land held by small and large farms is essential (though it must be noted that the classification of farms as small or large by area is conventional). **While in Poland only one-third of AL is held by large farms, across the EU the share approaches 70%.** The fact that the EU's agrarian structure is better than Poland's does not imply an advantage over Ukraine. In fact, such comparison requires setting aside the analysis of small-scale fragmentation and focusing on the significance of holdings over 100 ha. There were 15,000 such farms in Ukraine (out of 36,000 reporting – see Table 4), which constitutes 42% (see Table 5). Of the 20 million ha of AL managed by agricultural enterprises and farms (Table 5), as much as 96% was managed by large entities with over 100 ha. The scale of such resource concentration significantly exceeds that observed within the European Union. Only 325,000 farms in the EU exceeded 100 hectares in size, accounting for merely 4% of all agricultural holdings.

Table 4. Structure of agricultural holdings and utilised agricultural area (UAA) in Poland and the European Union (2020)

UAA size groups (ha)	Poland		EU	
	Number of farms (thousands)	UAA (thousand ha)	Number of farms (thousands)	UAA (thousand ha)
1–10	950	3,767	6,660	16,652
10–20	196	2,708	779	10,945
20–50	106	3,160	689	21,823
50–100	26	1,763	347	24,430
over 100	13	3,266	325	80,008
Total	1,317	14,682	8,923	153,861

Source: *Agricultural Census 2020*. Summary Report, Statistics Poland (GUS), Warsaw 2021; *Statistical Yearbook of Agriculture*, Statistics Poland (GUS), Warsaw 2023; Eurostat (https://ec.europa.eu/eurostat)

As previously mentioned, absolute figures concerning the number of entities do not determine their importance in the agricultural sector, as the key factor is the scale of resources concentrated in those entities. Compared to Ukraine, this figure remains relatively low – only half of the utilised agricultural area is managed by the largest farms. In this context, the situation in Poland appears even less favourable, with only one-fifth of farmland cultivated by large holdings. **Owing to their production scale, the largest farms dominate the supply of agricultural raw materials, generate higher income, possess better technical infrastructure, and apply advanced technologies.** Smaller entities with limited land resources struggle to achieve economies of scale, face restricted access to external financing, and often rely on labour-intensive production methods. As a result, they tend to explore value-added strategies, such as livestock production. Some supplement their income by developing non-agricultural sources of revenue, for instance through processing and direct sales. Nevertheless, agrarian structure provides a clear advantage for Ukraine in large-scale production of plant-based agricultural commodities.

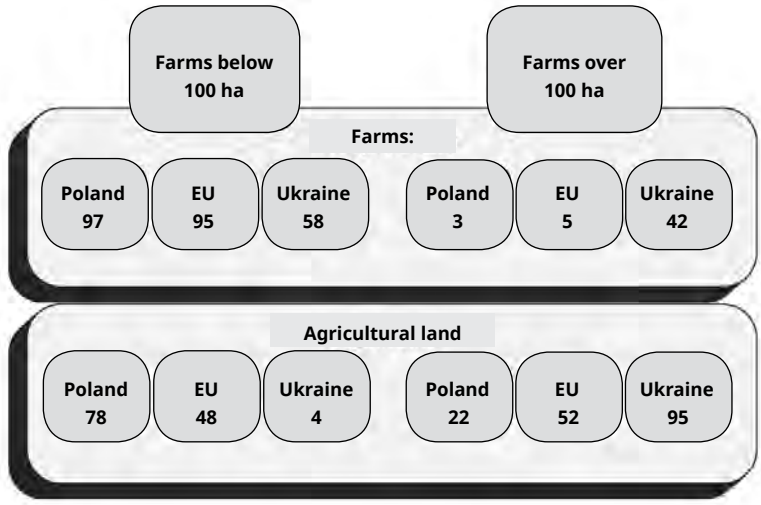
Table 5. Number and area of agricultural enterprises and farming households by size of utilised agricultural area in Ukraine (2020)*

Size (in ha)	Agricultural enterprises				Farming households			
	Number (%)		Area in thousand ha (%)		Number (%)		Area in thousand ha (%)	
Up to 5	174	(1.1)	0.4	(0)	1,801	(5.7)	6.0	(0.1)
5–20	412	(2.6)	5.1	(0.1)	4,526	(14.2)	57.3	(1.2)
20–100	1,279	(8.2)	71.4	(0.5)	12,742	(40.0)	614.9	(12.8)
100–500	2,520	(16.1)	669.8	(4.3)	5,369	(16.9)	1,258.3	(26.1)
500–1,000	1,454	(9.3)	1,060.2	(6.9)	1,262	(3.9)	897.7	(18.6)
1,000–4,000	2,986	(19.1)	6,007.5	(38.9)	926	(2.9)	1,581.6	(32.8)
4,000–7,000	445	(2.8)	2,233.1	(14.5)	65	(0.2)	402.0	(8.3)
7,000–10,000	132	(0.8)	1,107.0	(7.2)	–	–	–	–
Over 10,000	184	(1.2)	4,280.1	(27.7)	–	–	–	–

Landless farms	6,086	(38.8)			5,160	(16.2)		
Total	15,672	(100)	15,434.6	(100)	31,851	(100)	4,817.8	(100)

* Data refer to entities that submitted the annual Form 4-cr (cropping area report for agricultural crops) and meet statistical methodology criteria.
Source: Y. Zolotnytska, S. Kowalczyk, op. cit.

Figure 14. Agrarian concentration – share of farms and utilised area by size class (≤100 ha vs >100 ha)



Source: as in Table 4.

Employment in agriculture

Ukrainian agriculture accounted for approximately 15% of the country's total workforce, with labour resources in agriculture amounting to 2,692.7 thousand people.[40] Generally, a high employment share in agriculture is perceived as a structural weakness – not only of the sector but also of the broader economy – as it reduces the labour supply available to more productive and modern sectors. Long-term development trends suggest a gradual decline in agricultural employment in favour of services and industry. This transition is also observable in Ukraine, where the share of the agricultural workforce

40 A. Nowak, *Polish and Ukrainian Agriculture in Figures*, op. cit.

decreased from around 22% in the mid-1990s.[41] The current situation implies further adjustments are probable, although the process is unlikely to be evolutionary. This is due to the high potential of Ukrainian agriculture, which still requires considerable labour input to be fully realised. By contrast, EU Member States with substantial agricultural potential – such as France or Germany – have already undergone the transition towards capital-intensive farming. In these countries, employment plays a significantly smaller role in agricultural output, without compromising the scale or value of production.

Poland presents a different picture. Of the approximately 15.2 million employed persons in the economy, 1.218 million work in agriculture – 8.4% of total employment. Higher shares are observed in Romania (20%) and Greece (11%). In these countries, the fragmented agrarian structure necessitates further transformation. In contrast, countries such as Luxembourg and Malta report agricultural employment shares below 1%, though this is largely attributable to their economic structure and the marginal role of agriculture. In Poland and Ukraine, a reduction towards 3.5–4% – roughly in line with the EU average – appears likely.[42]

On average, Poland registers 8.2 persons employed per 100 ha of utilised agricultural area (UAA), compared to 6.5 in Ukraine. This is primarily a consequence of the fragmented farm structure in Poland. Labour demand declines with improvements in agrarian structure, and larger-scale production is generally associated with labour-saving technologies and greater mechanisation. Consequently, the economic surplus generated from farming is distributed among fewer workers, or similar labour productivity may be achieved with lower land-use intensity. This process is ongoing in Poland. According to Anna Nowak,[43] labour productivity in Polish agriculture is twice that of Ukraine, and land productivity is three times higher. In 2022, the average monthly gross wage in the Ukrainian economy equalled approximately PLN 1,370, while in agriculture it stood at PLN 1,130 – 83% of the national average. In Poland, average wages in agriculture (PLN 7,100) were comparable to the general average (PLN 6,350).[44] This comparison highlights Ukraine's strong cost competitiveness in agriculture, driven by lower wages. While agricultural and overall wages in

41 W. Dzun, M. Tereszczuk, *Ukrainian Agriculture in the Process of Systemic Transformation, Village and Agriculture*, IRWiR PAS, vol. 3, no. 152, Warsaw 2011.

42 L. Ossowska, D. Janiszewska, *Employment and the Intensity of Agriculture in the European Union Member States, Scientific Journal of Warsaw University of Life Sciences*, *Problems of World Agriculture* 2018, vol. 18, no. 3, pp. 238–247, https://doi.org/10.22630/PRS.2018.18.3.82.

43 A. Nowak, *Polish and Ukrainian Agriculture in Figures*, op. cit.

44 Statistics Poland, *Employment and Wages in the National Economy in 2022*, Warsaw 2023.

Ukraine will inevitably rise with economic development, the current stage reveals clear cost advantages.

Due to limited data availability, Ukraine lacks detailed statistics on labour distribution by farm size (see Table 6). In Poland, as across the EU, the majority of agricultural labour is concentrated in small farms up to 10 ha, which account for just over half of the sector's workforce. However, a clear difference emerges in the share of labour allocated to larger farms – those above 50 ha manage over 20% of agricultural labour in the EU, but only 9% in Poland.

Table 6. Agricultural labour input by farm size (annual work units – in thousands AWU) – Farms above 1 ha

Farm size (UAA)	EU		Poland	
Total	8,940	(100%)	1,402	(100%)
1–10	4,641	(53)	803	(57)
10–20	1,050	(12)	284	(20)
20–50	1,152	(13)	189	(14)
50–100	702	(8)	57	(4)
over 100	1,214	(14)	69	(5)

Source: Eurostat (https://ec.europa.eu/eurostat/)

Despite its remarkable potential, Ukrainian agriculture faces numerous challenges that may hinder its development. One of the most pressing concerns is chronic underinvestment, particularly in infrastructure and technology. Smallholders frequently lack access to modern agricultural equipment, credit, and resources essential for enhancing production efficiency.

The aforementioned differences in economic development levels, as measured by GDP, directly affect agricultural modernisation. EU funds have played a pivotal role in upgrading farms across Poland and other Member States. Whether through structural funds under Pillar II of the CAP or investment-oriented direct payments,[45] these resources have accelerated transformation within

45 W. Czubak, *Distribution of Direct Payments in Farms Benefiting from EU Funds in Wielkopolska*, *Problems of Agricultural Economics* 2008, no. 4, pp. 118–127.

the EU. In 2021, the gross value of fixed assets (current book prices) in Poland stood at PLN 4.486 trillion, of which approximately PLN 160 billion – or 3.5% – was held by the agricultural sector (see Table 7). In Ukraine, agricultural fixed assets were estimated at PLN 82.7 billion (UAH 583.5 billion), representing around 5% of the total fixed assets of the national economy. These figures must be assessed in relation to land and labour resources. Despite having a territory twice as large and employing twice as many agricultural workers, Ukraine's capital stock in agriculture remains half that of Poland – a clear indicator of undercapitalisation. From an EU integration perspective, these data also point to Ukraine's development potential. Unlocking pre- and post-accession funding streams could incentivise investment and lead to intensification through capital investment, driving improvements in technical and economic efficiency, output, and exports.

Table 7. Fixed assets in agriculture in 2021 (PLN million)

Fixed assets	Poland		Ukraine	
	Gross value of fixed assets	Investment outlays	Gross value of fixed assets	Investment outlays
Total	159,074.0	5,585.4	82,683.3	7,030.2

Source: *Statistical Yearbook of the Republic of Poland 2021*; *Agriculture of Ukraine (Сільське господарство України) 2022*. State Statistics Service of Ukraine. Kyiv, 2023.

The level of farm equipment with agricultural tractors and grain harvesters serves as one of the indicators for assessing capital endowment in agriculture.[46] In Poland, the number of tractors totals 1,447,700 units and grain harvesters 167,131 units.[47] This translates into 9.5 tractors per 100 ha of utilised agricultural area (UAA) and 1.4 harvesters per 100 ha of cereal cultivation. The Member States of the European Union possess a total of 8.4 million agricultural tractors. Across the 27 EU countries, this corresponds to 4.9 tractors per 100 ha of UAA and 1 harvester per 100 ha of cereal crops. In Ukraine, the number of tractors amounts to 130,500 and grain harvesters to 26,500.[48] Not only do these absolute numbers remain significantly lower, but the machinery per hectare ratio also reveals a far lower level of equipment. Of course, such a numerical comparison should be treated with caution, as it does not account for equipment

46 W. Poczta (ed.), *Farms in Poland Compared to Farms in the European Union*, op. cit.

47 Statistics Poland, *Statistical Yearbook of Agriculture*, Warsaw 2023.

48 Y. Zolotnytska, S. Kowalczyk, *Ukraine on the Global Agricultural Market*, op. cit.

quality. Large farms are equipped with the latest machines, characterised by high capacity and operational precision. In Poland, the degree of fixed capital wear in agriculture is estimated at 75%, which also applies to machinery and equipment. A considerable proportion of tractors are older, low-power units still in use, especially in small farms. It can be assumed – although data confirming this thesis are lacking – that a similar differentiation characterises the machinery distribution in Ukraine. **Most modern machinery belongs to agroholdings and remains concentrated in a limited number of the largest farms.** In summary, when comparing the technical endowment of farms in Poland and the European Union to that of Ukraine, a clear gap in Ukrainian agriculture becomes evident.[49]

Disparities between Ukraine and European countries in capital usage concern not only fixed capital but also working capital. Given the dominance of crop production in output structure, it is meaningful to compare the consumption of fertiliser and plant protection products (Table 8). The use of NPK fertilisers per hectare of UAA in Poland nearly doubles that of Ukraine, while the EU average exceeds Ukraine's usage by 20%. Even greater disparities emerge in the case of plant protection products. Active substances used per hectare in Ukrainian agriculture are three times lower than in Poland and four times lower than in the EU.

Similarly to production intensity measured by the use of yield-enhancing inputs, the technical endowment of land and labour in Ukraine remains lower compared to Poland and EU Member States. One major reason lies in the dual nature of agriculture. Small, economically weak family farms generally lack capitalisation, do not possess sufficient investment resources, and face restricted access to external funding, rendering them unable to finance capital investments. Some of them lack the financial capacity to conduct high-input agriculture based on the use of yield-enhancing inputs. Conversely, large-scale farms attain satisfactory economic outcomes with lower production intensity while maintaining substantial output thanks to vast cultivated areas. This demonstrates that land resources overall, coupled with their quality, reinforced in the future with further fixed asset investments, offer the potential for even greater output scale and competitiveness.

49 Y. Zolotnytska, S. Kowalczyk, *Ukraine on the Global Agricultural Market*, op. cit.

Table 8. Mineral fertiliser and plant protection product use per hectare of UAA (in kg)

Type	EU	Poland	Ukraine
NPK	93.8	130.5	76.51
N	62.5	69.1	52.4
P	14.4	24.0	13.35
K	16.9	37.4	10.76
Plant protection product use (active substance, kg/ha)	3.22	2.3	0.8

Source: *Statistical Yearbook of Agriculture*, Statistics Poland, Warsaw 2023; Eurostat (https://ec.europa.eu/eurostat/); *Agriculture of Ukraine*, State Statistics Service of Ukraine, Kyiv 2023

Production factor availability and their mutual relations determine the resulting output (Table 9). Ukrainian agriculture, with twice the amount of land resources and markedly better UAA quality, generates agricultural products of comparable value to Polish agriculture. A comparison with EU countries shows that Ukraine's agricultural land accounts for over 20% of the EU's total resources, while its production value represents only 8%. The first reason lies in the marginal role of livestock production. Only 18% of Ukraine's total agricultural output derives from livestock, while in Poland it constitutes half. The predominance of raw crop production means that Ukraine loses the opportunity to increase production value by feeding cereals to livestock. Nevertheless, at the microeconomic level, such production structure enables satisfactory economic outcomes. In very large farms, the scale of commercial crop production ensures satisfactory financial results and does not require production diversification, including livestock breeding.

Moreover, achieving these outcomes does not demand the highest production intensity (as illustrated by lower mineral fertiliser use). Livestock production entails higher risk, requires additional labour, investment in buildings and structures, and finding new sales markets for large batches, as well as incurs higher storage and transport costs for meat and dairy. A functioning agro-processing industry must emerge around agriculture – at least at the primary level – such as slaughterhouses, cold storage for meat, dairies, and egg warehouses. Only a well-developed agribusiness infrastructure enables large-scale production and marketing of animal-origin products. Undoubtedly, examples

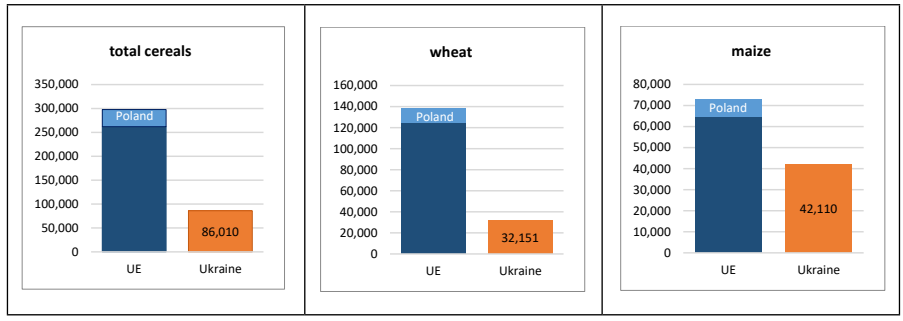
of such vertical integration exist, and reconstruction of the sector following the war may accelerate dynamics in this direction. These potential changes may also be driven by overall national development, particularly under EU membership conditions. Ukraine will gain access to the single agricultural market, and enterprises will seek new areas of competitiveness. Foreign investment will flow into the country, and the labour potential will grow alongside human capital development. Internal market demand will also shift. In a wealthier society, rising affluence will drive a shift in food consumption patterns, increasing demand for meat and other animal-based products.

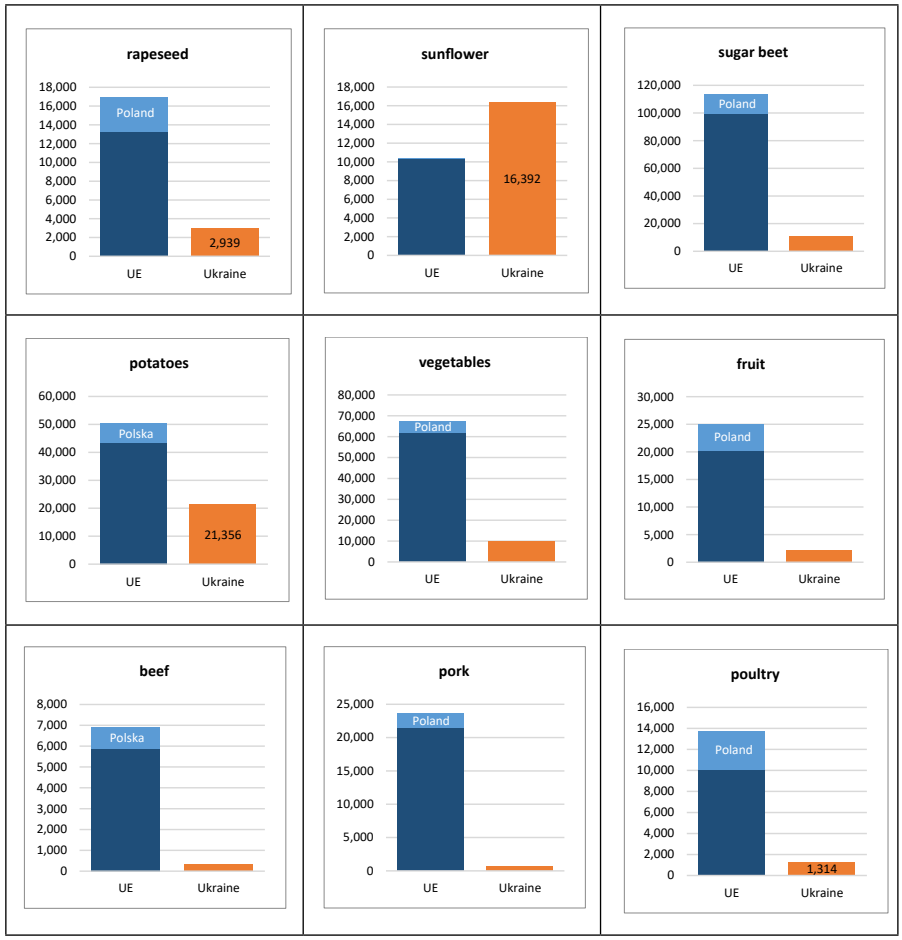
Table 9. Value of agricultural production in 2021 (in EUR million)

Category	EU	Poland	Ukraine
Gross production including	517,115	39,381	41,524
crop output	287,723	19,754	34,149
animal output	205,890	18,895	7,375
Intermediate consumption	316,275	25,293	24,510
Gross value added	220,898	14,254	17,905

Average exchange rate used for 2021: 1 UAH = 0.03104 EUR (https://www.exchange-rates.org/pl/historyczne-kursy-wymiany/uah-eur-2021).
Source: Statistical Yearbook of Agriculture, Statistics Poland, Warsaw 2023; Eurostat (https://ec.europa.eu/eurostat); Agriculture of Ukraine, State Statistics Service of Ukraine, Kyiv 2023.

Figure 15. Comparison of crop and livestock production scale in Ukraine relative to the European Union and Poland (in thousand tonnes)





Source: Statistical Yearbook of Agriculture, Statistics Poland, Warsaw 2023; Eurostat (https://ec.europa.eu/eurostat/); Agriculture of Ukraine, State Statistics Service of Ukraine, Kyiv 2023.

Ukraine effectively exploits favourable conditions for crop production. A comparison of key crops and selected livestock production indicators (Figure 15) confirms a crop-oriented specialisation. Cereal crops dominate (56% of sown area), followed by oilseeds (32%), especially sunflower. A large share of the harvest is allocated for export, while the scale of production, compared to the entire EU, confirms Ukraine's significance. Over 86 million tonnes of total cereals represent nearly 30% of the EU's output, and in the case of maize, nearly 60%. Ukraine is also a major producer of potatoes, particularly in its western regions, which are less favourable for cereals and oilseeds. Conversely, meat production, especially red meat, remains relatively marginal.

Favourable soil conditions allow Ukraine to dominate wheat cultivation among the main cereals. The area under wheat cultivation is three times larger than

in Poland, while the area for maize production is five times greater. The aforementioned lower production intensity in Ukraine (e.g. lower mineral fertiliser use) is reflected in yields. For most crops, yields in Ukraine fall below those in Poland. Cereals display comparable technical productivity. The most significant gap appears in sugar beet yields, though this crop occupies only a minor share of agricultural land in Ukraine. These results indicate that Ukraine's crop production volume stems from extensive sown areas rather than high input intensity. Of course, this situation may change once conditions within the EU single market enable further export expansion.

Agricultural and agribusiness development will open the way to closing the intensity gap, increasing value added and improving economic results. Currently, Ukraine's agricultural value added remains similar to that of Poland. Given its twice-larger land and labour inputs, however, economic efficiency (in terms of income generation) remains significantly lower (Table 11).

Table 10. Area under cultivation (in thousand ha) and yields (dt/ha) for main crops in Ukraine and Poland

Crop	Poland		Ukraine	
	Area under cultivation (in thousand ha)	Yields (dt/ha)	Area under cultivation (in thousand ha)	Yields (dt/ha)
Cereals	7,197	49.5	15,995	47.1
– wheat	2,518	53.4	8,414	47.0
– barley	639	44.3	2,476	37.0
Maize	1,196	71.1	5,522	67.0
Rapeseed	1,078	33.8	1,311	29.3
Sunflower	b.d.	b.d.	6,622	25.6
Sugar beet	222	638.0	227	479.1
Potatoes	196	308.0	1,283	251.3

Source: Statistical Yearbook of Agriculture, Statistics Poland, Warsaw 2023; Eurostat (https://ec.europa.eu/eurostat); Agriculture of Ukraine, State Statistics Service of Ukraine, Kyiv 2023; USDA Foreign Agricultural Service (https://ipad.fas.usda.gov)

Table 11. Efficiency of production factor use

Indicator	EU	Poland	Ukraine
Productivity of production factors			
land (EUR per 1 ha of UAA)	3,279	2,634	1,005
labour (EUR per worker)	55,780	32,325	15,421
capital (EUR per 1 EUR of gross fixed assets)		1.1	2.3
Profitability (measured by gross value added)			
land (EUR per 1 ha of UAA)	1,401	953	433
labour (EUR per worker)	23,828	11,700	6,649
capital (EUR per 1 EUR of gross fixed assets)		0.4	1.0

Source: as in Table 10.

A number of factors, including lower capital intensity in production, result in land productivity in Ukraine being three times lower than in EU countries. In comparison with Poland, capital productivity is higher, but this stems from the already mentioned lower fixed capital endowment. Consequently, similar disparities – this time concerning the returns on land and capital – emerge to the disadvantage of Ukraine. From the perspective of agricultural economics, however, labour productivity and profitability are the most critical indicators, particularly the latter, as it determines wages – the key element of remuneration in any economy. In 2021, labour profitability in Ukraine was half that of Poland and more than three times lower than the EU average. This illustrates the significant untapped reserves still present in Ukrainian agriculture.[50] The direction and pace of change will largely depend on the evolution of the market environment. The agri-food processing industry and processed goods trade are likely to play a key role.

50 *Agriculture in Ukraine: Pre-War, Status Quo and a Look Ahead*, July 2023, Center for Food and Land Use Research, Kyiv School of Economics, https://kse.ua/wp-content/uploads/2024/03/Market-analysis-and-Outlook-of-Ukraine-2023.pdf.

The value created by Ukraine's agri-food industry remains incomparably lower than that of Poland's. The gap widens further when taking into account the value of raw agricultural products used in processing. According to the data (Table 12), the value of sold production of food, beverages and tobacco products in Ukraine in 2022 amounted to PLN 120 billion, compared with PLN 440 billion in Poland – a difference of 3.5 times.[51] Among all processed product categories, jam production is the only one where values are comparable. In other categories, Poland significantly outpaces Ukraine: sugar production is 1.5 times higher, flour twice as high, fruit juices three times higher, beef four times higher, and pork five times higher. Given the abundant supply of domestic raw materials, Ukraine's food processing industry holds substantial development potential. The high share of processed food in Ukraine's agri-food imports further illustrates the opportunities for expanding the domestic processing sector.[52] Naturally, this expansion will depend on political and economic stability, the scale of investment, and the level of interest in foreign direct investment. In this context, it is worth considering anticipatory measures in Poland – leveraging access to lower-cost imported inputs from Ukraine to process them domestically and export semi-finished or ready-made products with added value.

Table 12. Production of selected agri-food products (2022)

Product category	Poland	Ukraine
Beef (cattle and calves), in thousand t	216.8	55.0
Pork (pigs), in thousand t	1,342	251.7
Poultry meat, in thousand t	3,358	758.3
Fruit and vegetable juices, in thousand hl	13,197.7	4,096
Fruit jams, in thousand t	49.7	56.3
Flour, in thousand t	2,726	1,456.7
Sugar, in thousand t	2,145.6	1,449.7

Source: Statistics Poland (GUS), Warsaw; Statistical Yearbook of Ukraine (2023), State Statistics Service of Ukraine, Kyiv.

51 *Statistical Yearbook of Ukraine 2023*. State Statistics Service of Ukraine.

52 *Agriculture in Ukraine: Pre-War, Status Quo and a Look Ahead*, op. cit.

For EU countries, including Poland, the rising competitiveness of Ukrainian agriculture poses a significant challenge. Ukrainian agricultural production benefits from economies of scale – operations are carried out on very large, professionally managed farms situated on top-quality soils, allowing for large and stable yields even with lower input intensity. **These large farms are equipped with modern machinery, while labour costs in Ukraine are relatively low.** As a result, the cost of production is lower, which creates a competitive advantage based on production costs. This makes Ukrainian agricultural goods highly competitive, placing downward pressure on prices within the European Union and potentially reducing incomes for EU farmers. The agricultural sector in the EU, particularly in countries with higher labour costs and stricter production standards, may struggle to remain competitive without government and EU-level support. These challenges call for a proactive response from the Common Agricultural Policy. In Poland, it is vital to consider the development of domestic food processing capacities that not only handle domestic production but also use lower-cost Ukrainian inputs to produce and export value-added goods.

Foreign Trade

Over the past decade, Ukraine has become one of the world's leading exporters of agri-food products. Prior to the outbreak of war in 2022, Ukraine ranked first globally in exports of sunflower oil (54% of global exports) and sunflower meal (46%), third in barley (17%) and rapeseed (20%), fourth in maize (12%) and fifth in wheat (9%). In 2020, the total value of Ukraine's agri-food exports reached EUR 19.5 billion.

At the same time, it is important to emphasise that **Ukraine's agri-food exports are dominated by raw commodities, with grains accounting for the largest share** – 43.6% or EUR 8.25 billion (in 2020). In contrast, exports of processed food products in the same year amounted to only EUR 2.95 billion. This highlights the nature of enterprises in the agri-food sector and their contribution to value added, as well as issues related to value chain cooperation and collaboration between agricultural producers and the food processing industry. **Gaps in both vertical and horizontal cooperation within the agri-food sector have long been a subject of political and academic debate in Ukraine, yet three decades of reforms have failed to bring about major changes or strengthen collaboration.**

Any analysis of Ukraine's foreign trade should also consider the agri-food sector's share in total export revenues. In 2020, it accounted for nearly 45% (EUR 19.5 billion) of all foreign exchange earnings from exports. This context, together with the ongoing war, helps to explain the Ukrainian government's determination to actively promote agri-food exports – including to the EU. However, sustainable development in Ukraine requires a stronger focus on increasing value added within the sector.

Ukraine has also reached top global positions in the production of selected agricultural commodities: it ranked first in sunflower production (30.6% of global output in the 2021/2022 marketing year with 17.5 million tonnes), second in sunflower oil (30.6% with 9.9 million tonnes) and sunflower meal (27.5% with 5.5 million tonnes), fourth in barley (6.8% with 7.6 million tonnes), sixth in maize (3.5% with 41.9 million tonnes) and rapeseed (4.2% with 3.0 million tonnes), and seventh in wheat (4.3% with 33.0 million tonnes). Ukraine is also one of the world's leading exporters: first in sunflower oil (54% of global exports) and sunflower meal (46%, although the share of these products in overall agri-food trade remains relatively low), third in barley (17%) and rapeseed (20%), fourth in maize (12%), and fifth in wheat (9%).[53]

Ukraine's situation with respect to trade should be analysed in three distinct periods:

- Before the war (until 2021), Ukraine was one of the world's largest exporters of cereals and vegetable oils. It was the global leader in sunflower oil exports (54% of the world market), the fourth largest exporter of maize (12%) and the fifth largest exporter of wheat (9%). In 2020, the value of agri-food exports amounted to EUR 19.5 billion, with agri-food products accounting for almost 45% of all foreign exchange earnings from exports.
- During the first years of the war (2022–2025), port blockades led to a sharp decrease in exports and market destabilisation. Foreign sales volumes dropped significantly and the structure of trade shifted towards land exports. In the second half of 2023, the situation improved thanks to the partial unblocking of sea routes and support from the European Union.
- Currently (2024–2025), exports continue to be mainly transported by sea and remain relatively stable (85–90%), but volumes are lower due to drought and a decline in crop yields. As a result, Ukraine retains its status

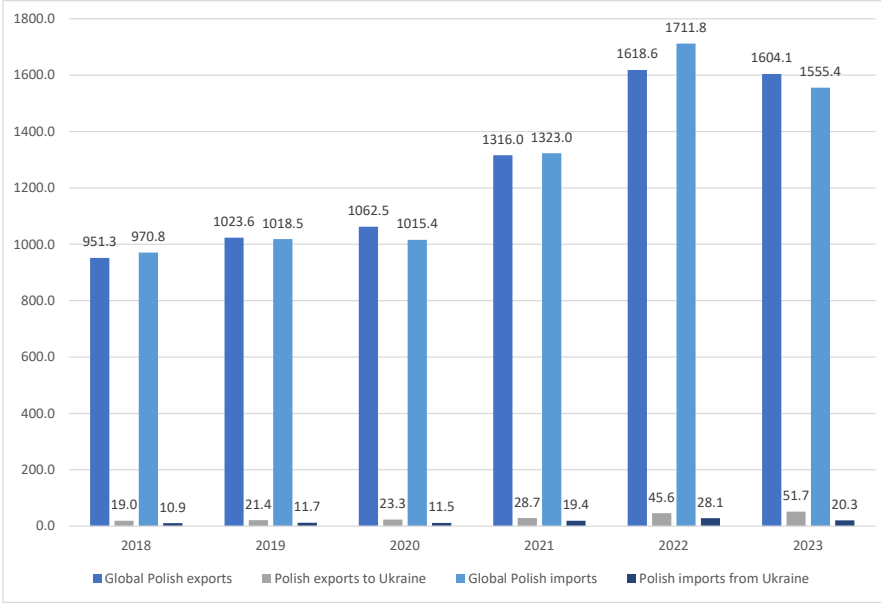
53 Foreign Agricultural Service of the United States Department of Agriculture, *Ukraine Agricultural Production and Trade*, 2022, https://www.fas.usda.gov/sites/default/files/2022-04/Ukraine-Factsheet-April2022.pdf (access date: 13 October 2024).

as a major cereal and oil exporter, but the structure and value of those exports is more volatile than before the war.

Poland–Ukraine trade

For several years, Poland has maintained a significant positive trade balance with Ukraine, increasing from PLN 8.08 billion in 2018 to PLN 31.4 billion in 2023. Total exports to Ukraine reached a record PLN 51.7 billion that year, with the largest revenues generated by mineral products (mainly petroleum-based), mechanical machinery and equipment, vehicles, arms and ammunition, and chemical industry products. Imports from Ukraine, in turn, amounted to PLN 20.3 billion in 2023[54] (Figure 16).

Figure 16. Poland's foreign trade in goods with the world and with Ukraine in 2018–2023



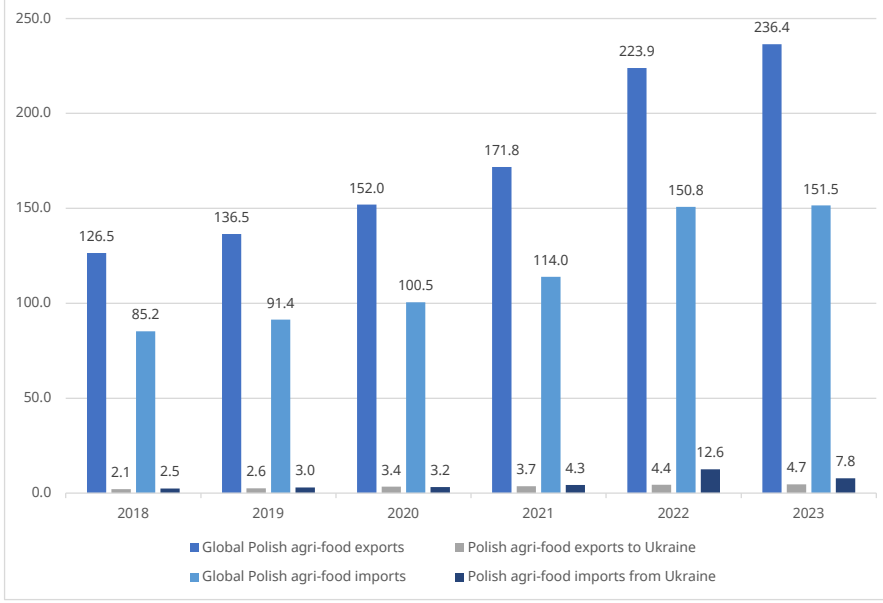
Source: own elaboration based on Statistics Poland (GUS) data

Compared to Poland's overall foreign trade in agri-food products, cooperation with Ukraine holds significance but does not place Ukraine among the top foreign trade partners in terms of turnover (Figure 17). Despite steady growth, Ukraine's share in Poland's agri-food exports reached only 2.0% in 2023, while imports from Ukraine accounted for 5.1%. In the past six years, Poland recorded a positive trade balance in agri-food products with Ukraine

54 W. Czubak, S. Kalinowski, W. Pepliński, *Grain of Discord*, op. cit.

only once – in 2020 (PLN 126 million). In all other years, the balance ranged from PLN –8.1 billion to PLN –0.4 billion, with a value of PLN –3.03 billion in 2023.

Figure 17. Poland's foreign trade in agri-food products with the world and with Ukraine in 2018–2023



Source: own elaboration based on Statistics Poland (GUS) data.

Poland has steadily increased its agri-food exports to Ukraine. The key categories are processed food products and animal feed, which together made up 58% of agri-food exports (PLN 2.73 billion in 2023), with consistent annual growth from PLN 1.11 billion in 2018. The next largest category consists of products of plant origin (e.g. fruit and vegetables), amounting to PLN 1.08 billion in 2023, up from PLN 0.43 billion in 2018.

Agri-food imports from Ukraine reached PLN 7.8 billion in 2023, constituting 38.3% of Poland's total imports from Ukraine (see Table 13).

Table 13. Structure of agri-food imports from Ukraine in 2018–2023 (PLN billion)

Product groups (CN 2024 classification) 2024	Years					
	2018	2019	2020	2021	2022	2023
I – Live animals; products of animal origin	0.33	0.31	0.21	0.32	0.75	0.42
of which: natural honey	0.09	0.09	0.14	0.15	0.13	0.09
II – Products of plant origin	0.88	1.01	0.83	1.09	6.02	2.29
of which: cereals	0.14	0.11	0.02	0.07	2.80	1.03
III – Animal or vegetable fats and oils, and their cleavage products; prepared edible fats; waxes of animal or vegetable origin	0.55	0.76	1.22	1.70	3.95	2.75
of which: sunflower oil	0.23	0.27	0.53	0.50	2.51	1.61
IV – Prepared foodstuffs; non-alcoholic and alcoholic beverages; tobacco and substitutes; nicotine-containing products for inhalation without combustion or other delivery	0.73	0.97	0.99	1.14	1.83	2.30

Source: own elaboration based on Statistics Poland (GUS) data.

Cereals represented the largest share of plant-origin products, with a particularly sharp increase in 2022 due to the EU market opening and limited access to Ukraine's traditional export destinations. That year, Poland imported cereals worth PLN 2.8 billion from Ukraine, which accounts for 52.3% of Poland's total cereal imports. However, in 2023, both the volume and share decreased significantly to PLN 1.03 billion and 31.0%, respectively. For context, the total value of Poland's cereal imports declined from PLN 5.3 billion in 2022 to PLN 3.3 billion in 2023, returning to levels closer to 2020 and 2021 (PLN 2.2 and 2.3 billion, respectively).

Export Potential of Poland and Ukraine

Poland's greatest export potential[55] lies in products such as machinery, motor vehicles and parts, as well as plastics and rubber goods, although agri-food products still account for a solid 13% of total exports. Notably, machinery exports feature a wide gap between potential and actual performance, suggesting the opportunity to increase sales by an additional USD 26 billion. In the food sector, while Poland does exhibit export potential, its performance is somewhat weaker. Food products rank seventh among subsectors, with a total potential of USD 12 billion and an untapped potential of USD 5.2 billion. The picture is even less favourable for poultry meat (ranked 17th) and other meats (18th), both with an export potential of USD 4.1 billion. Dairy products rank next, with a potential of USD 3.8 billion. It is worth mentioning that, in total, the untapped potential across these food categories exceeds USD 5 billion.[56]

The Polish products with the highest export potential to Ukraine include: mineral/chemical nitrogen, phosphorus and potassium fertilisers; motor vehicles for transporting goods; and passenger vehicles for fewer than ten people.

55 The potential export value of a product supplied by a given country to a foreign market is calculated as supply × demand (adjusted for market access) × bilateral ease of trade. Supply and demand are projected into the future based on GDP and population forecasts, demand elasticities, and forward-looking tariffs. The estimated value in dollars serves as a reference point for comparison with actual exports and should not be interpreted as a maximum value. In reality, trade value may be lower or higher than the potential value.

56 It should be emphasised that the data presented are not current export values, but estimates of medium-term potential (3–5 years). The ITC study is based on an analysis of demand trends, GDP growth and bilateral trade flows. Therefore, these data should be treated as a forecast of possible export growth under favourable economic conditions, rather than a reflection of the current situation. It is worth noting that this potential does not take into account current fluctuations resulting from war, climate change (e.g. droughts in 2024 and 2025) or the current situation on transport markets. ITC analyses rather point to structural export opportunities that may materialise once production and logistical conditions stabilise.

Figure 18. Polish products with export potential to Ukraine

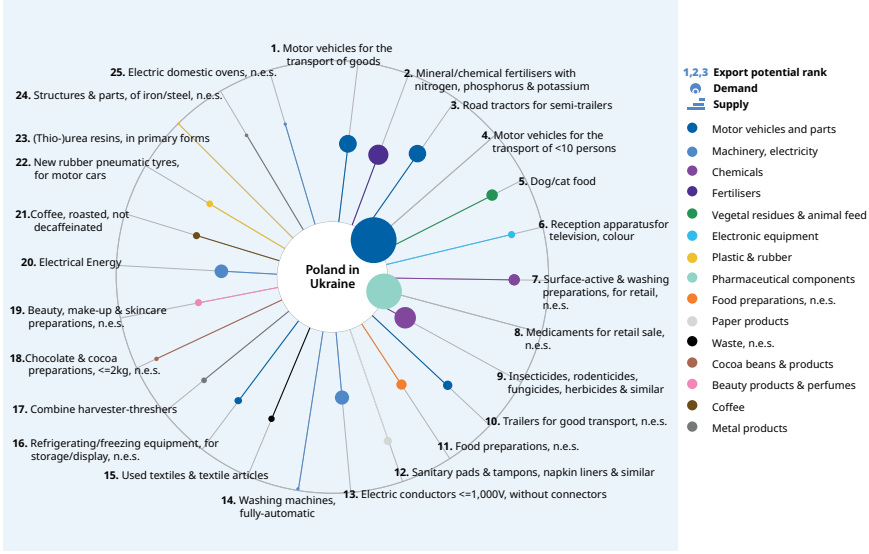
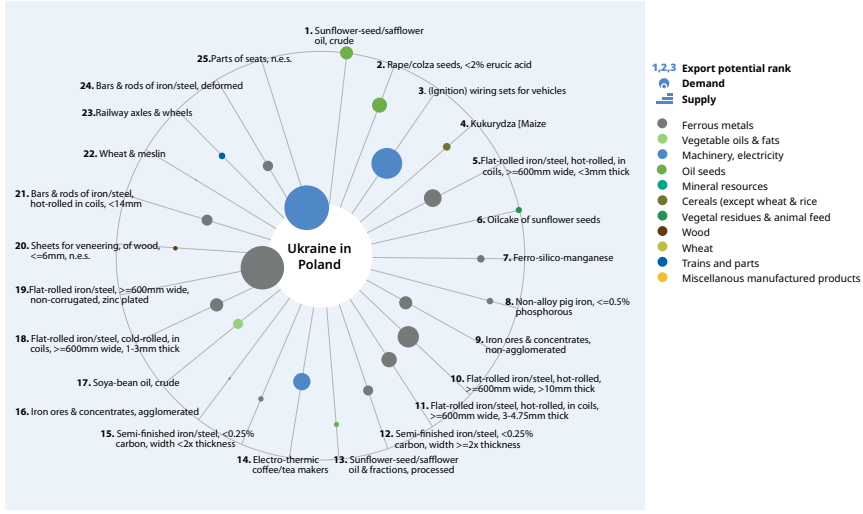


Figure 19. Ukrainian products with export potential to Poland

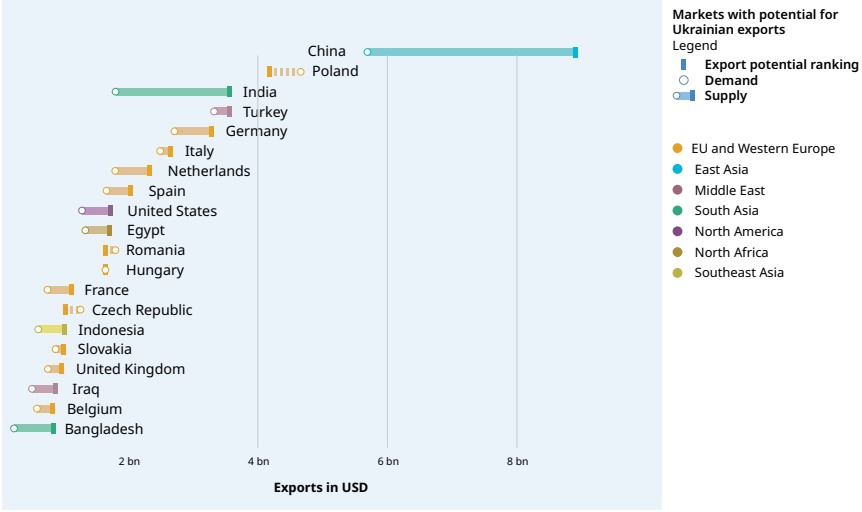


Source: https://exportpotential.intracen.org.

Markets with the greatest export potential for Ukraine include China, Poland and India. China registers the highest absolute gap between potential and actual exports in value terms, leaving room for an additional export volume worth USD 4.2 billion. Ukraine's total export potential to China amounts to USD 8.8 billion. For Poland, that untapped export potential reaches USD 1.2 billion; however, current exports already total USD 4.7 billion, exceeding the potential

value of USD 4.1 billion. This suggests that Ukraine effectively capitalises on trade opportunities stemming from geographic proximity. Notably, European countries dominate the list of the top 20 potential buyers of Ukrainian goods.

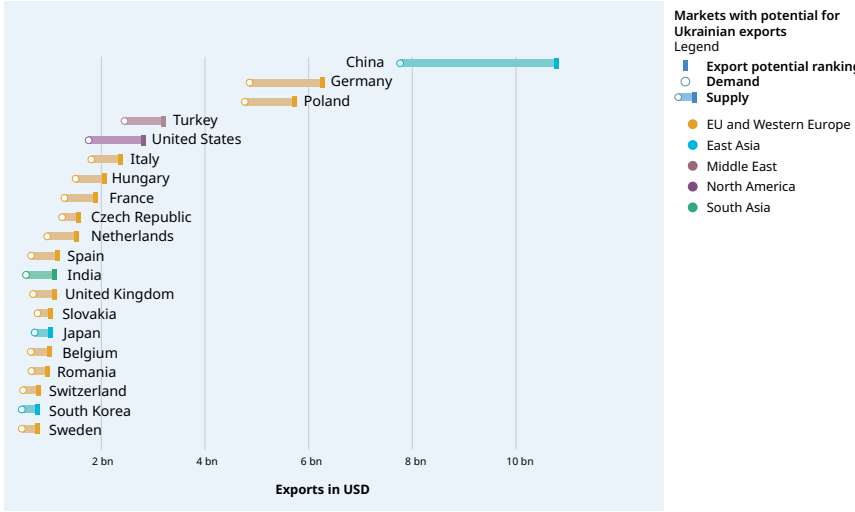
Figure 20. Markets with the greatest export potential for Ukraine



Source: https://exportpotential.intracen.org.

The leading suppliers with the highest export potential to Ukraine include China, Germany and Poland. China again demonstrates the largest absolute gap between potential and actual exports, with an unused potential of USD 3.6 billion. Germany, although ranking fifth in export potential, emerges as the second largest potential exporter to Ukraine, with an untapped value of USD 2 billion. Poland also retains USD 1.9 billion of unused potential.

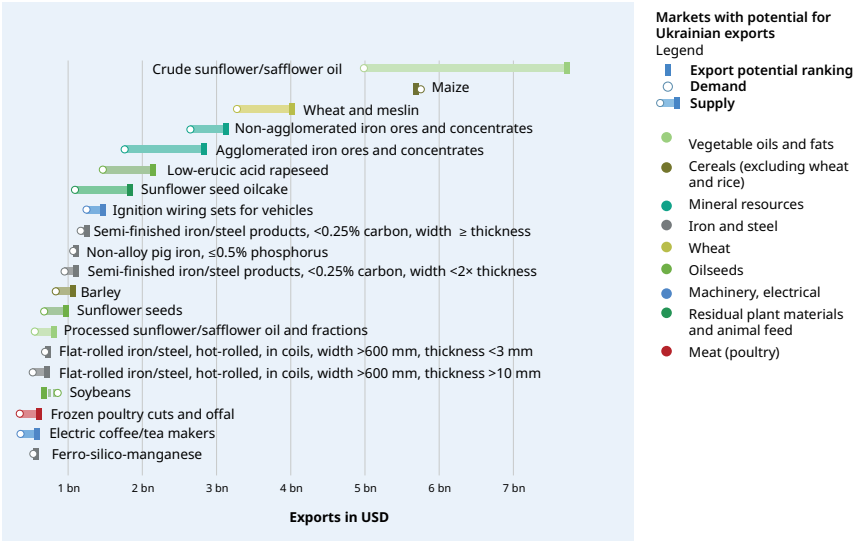
Figure 21. Markets with the greatest export potential to Ukraine



Source: Export Potential Map, https://exportpotential.intracen.org

The top products with the greatest export potential from Ukraine to global markets include sunflower/safflower oil, maize and wheat. Sunflower/safflower oil ranks highest in terms of untapped export value, with a gap of USD 2.8 billion. Other significant agricultural products include rapeseed (USD 884 million), sunflower seed cake (USD 682 million) and barley (USD 367 million). The total potential for vegetable oils and fats amounts to USD 8.7 billion, of which USD 3.2 billion remains unrealised. Cereals other than wheat and rice register high potential as well – USD 6.7 billion in total, with USD 1.7 billion untapped – followed by wheat (USD 4 billion, USD 1.5 billion untapped) and oilseeds (USD 3.6 billion, USD 1.7 billion untapped). Food products and poultry meat also demonstrate strong export potential – USD 950 million and USD 547 million for food, and USD 911 million and USD 536 million respectively for poultry.

Figure 22. Ukrainian products with export potential



Źródło: *Export Potential Map*, op. cit.

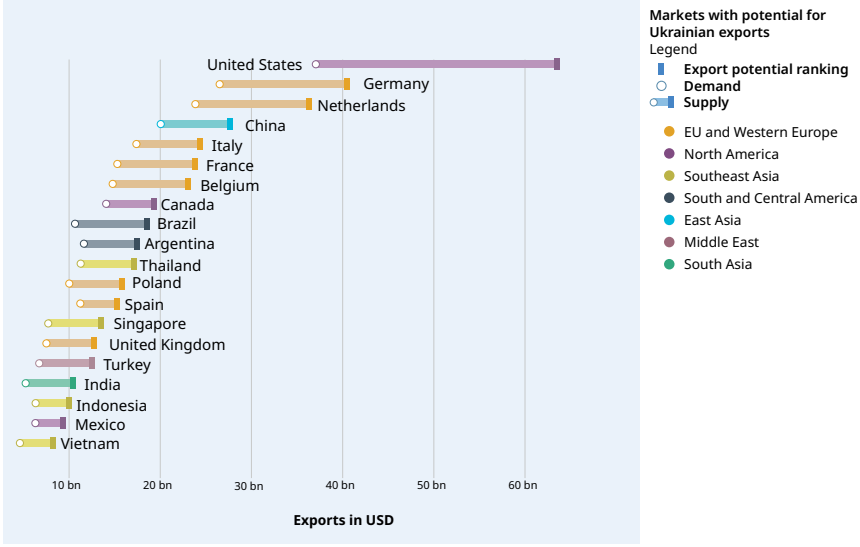
Poland ranks among Ukraine's key trade partners in the food sector. According to estimates by the International Trade Center (ITC), Poland holds the top position in terms of export potential for processed food and animal feed (USD 386 million), with an untapped value of USD 129 million. Poland also leads in potential exports of animals and animal products (USD 215 million, USD 38 million untapped), ranks third for beverages (USD 103 million), fourth for cereals (USD 18 million, following Hungary, India and Romania), and sixth for horticultural products (USD 66 million). Most agricultural products continue to offer growth opportunities.

Regarding animal and animal product exports from Ukraine, the most promising markets include China (USD 199 million potential, USD 166 million untapped), Saudi Arabia (USD 109 million, USD 18 million) and Poland (USD 71 million, USD 11 million). The top ten also feature Iraq, the United Arab Emirates, the Netherlands, Germany, Moldova, the United States and Kazakhstan. In the grain segment, Turkey leads (USD 1 billion potential, USD 218 million untapped), followed by China (USD 995 million, USD 91 million), Egypt (USD 626 million, USD 93 million), Spain (USD 610 million, USD 4.7 million) and Bangladesh (USD 519 million, USD 319 million). Poland does not rank among the top ten but retains a potential of USD 222 million, including USD 21 million untapped. In processed goods, China dominates with an untapped potential of USD 157 million (USD 679 million total potential), followed by Poland (USD

57 million untapped, USD 229 million total) and Turkey (USD 100 million untapped, USD 216 million total).

The global leaders in processed food and animal feed export potential include the United States, Germany and the Netherlands. The United States registers the highest absolute export gap, with USD 29 billion of untapped value. In this segment, Poland surpasses Ukraine in total export potential.

Figure 23. Export potential of Ukrainian food products and animal feed



Source: *Export Potential Map*, op. cit.

Analysis of Safeguard Mechanisms and Benefits for the Polish Agri-Food Sector

Full EU membership for a candidate country entails adoption of the entire *acquis communautaire*. In selected areas, economic, social or political considerations justify exemptions, with the parties negotiating transitional periods. A transitional period refers to a time during which specific legal provisions remain non-binding for the acceding country. This mechanism allows both the acceding state and the EU to safeguard interests in sensitive sectors. In Poland's accession negotiations, the labour market represented a sensitive area, resulting in a seven-year transitional period for Polish citizens to take up employment in existing Member States. The EU's Common Agricultural Policy (CAP) and trade liberalisation also involved numerous transitional arrangements. Following Poland's accession, the agricultural sector needed to align with new standards and regulations. **Transitional measures were designed to allow agribusiness stakeholders – including farmers and food processing plants – to adapt to these requirements and smoothly integrate into the EU single market.** As Ukraine progresses on the path to EU integration, its agricultural enterprises will also need to comply with single market standards.[57] The pre-accession process will require alignment with EU agricultural production norms.

Land ownership emerged as a critical issue warranting transitional provisions. Since the onset of Poland's membership talks, concerns about foreign capital inflows and the risk of farmland acquisition led the Commission to propose a seven-year transitional period. This timeframe was deemed sufficient to allow candidate countries to restructure their agricultural sectors. The assumption was that after seven years, the purchasing power of domestic farmers would increase enough to mitigate the risk of mass land purchases by foreigners.

Poland's EU accession triggered significant changes in the agricultural support system. One key development involved the introduction of direct payments.

57 *Agriculture in Ukraine: Pre-War, Status Quo and a Look Ahead*, op. cit.

Poland negotiated favourable initial payment levels. Between 2004 and 2007, direct payments reached 25%, 30%, 35% and 40% of the level applied in older Member States, with a planned annual increase of 10%. Additionally, Poland secured permission to reallocate some funds from rural development programmes to increase these payments, raising total support to 55% in 2004, 60% in 2005 and 65% in 2006 of the full EU level.

Other sector-specific issues were addressed through transitional arrangements. To facilitate a smooth transition to EU standards, Poland negotiated multiple transitional periods, including a three-year period for compliance with milk quota mechanisms, a three-year period for establishing minimum quantities for intervention purchases in the meat sector, a five-year period for adjusting fat content in drinking milk, and a five-year period for defining minimum quantities of raw tobacco needed to establish producer groups. Poland also obtained a five-year transitional period for forming producer organisations and a three-year period for registering cattle breeds eligible for suckler cow premiums.

In the areas of animal health and food safety, Poland secured notable exemptions. A three-year period was granted to modernise milk, meat and fish processing plants, allowing enterprises additional time to meet EU requirements. Uniquely, Poland was authorised to continue domestic sales of lower-quality dairy products, a significant concession from the EU. These provisions helped producers adjust to the new regulatory framework and mitigate financial losses.

One of Poland's key achievements concerned flexibility in milk processing. Until the end of 2006, milk that failed to meet the highest EU standards could be processed not only in plants covered by transitional provisions but also in fully compliant facilities. For Polish milk producers, this approach supported a gradual adaptation process and reduced production losses. To safeguard domestic markets, the EU required Polish dairies to restrict the circulation and consumption of such products to the national market until transitional periods ended.

In the area of animal welfare, Poland negotiated a transitional period for poultry farms to adjust to the new EU standards on laying hen husbandry. This granted poultry producers more time to modernise their farms and meet higher animal welfare standards. Favourable arrangements also applied to phytosanitary regulations. Poland secured an extension of the deadline for adapting registration documentation for certain plant protection products and a 10-year transitional period during which only potato varieties resistant to potato wart

could be cultivated. These transitional periods enabled Polish farmers to adapt more smoothly to new phytosanitary requirements.

Ukraine's accession to the European Union will undoubtedly pose a range of new challenges for agriculture on both sides of the accession agreement. Increased competition from Ukrainian producers may lead to falling prices of agricultural products and reduce the competitiveness of Polish agriculture, potentially lowering Polish farmers' incomes. To mitigate these effects, protective mechanisms may be considered during the initial phase. **Drawing on Poland's EU accession experience, the following safeguards could be implemented:**

Direct payments and rural development support

- Differentiation of direct payment levels across EU countries in a way that benefits Polish farmers, particularly in regions most exposed to Ukrainian competition.
- Active participation in Common Agricultural Policy negotiations to ensure adequate representation of Polish interests.

Transitional periods

- Introducing transitional periods allowing Polish producers and processors to gradually adjust to new market conditions, especially in product categories expected to face significant import flows from Ukraine.
- Applying market intervention mechanisms to stabilise prices of agricultural products in the event of oversupply, even though such instruments currently play a marginal role on most agricultural markets.

Product quality assurance

- Expanding the number of products covered by geographical indication labels to protect traditional Polish products from foreign competition.

Support for processing development

- Supporting investments for modern processing technologies to increase the added value of agricultural products and enhance their market competitiveness.
- Promoting cooperation between Polish producers and retail chains, along with boosting domestic demand for national products through information campaigns, education and promotion to ensure preferential treatment of local goods.

Support for producer organisations

- Financial and advisory support for producer organisations to strengthen their capacity to negotiate product prices and sales terms more effectively.
- Implementation of the above safeguard mechanisms would help mitigate the negative effects of Ukraine's EU accession on Polish agriculture. However, protecting Polish producers must go hand in hand with openness to cooperation with Ukrainian partners. Joint initiatives may benefit both sides, enhancing regional competitiveness and strengthening food security. **Protective measures should always comply with EU legal provisions and must not restrict competition in the internal market.**

Potential Scenarios for Poland and Ukraine Following Ukraine's EU Accession

Although Poland and Ukraine are at different stages of European integration, their economies are closely interconnected, especially in the agri-food sector. Developments in one country inevitably affect the other. Nevertheless, this is not a zero-sum game in which one side's gains equate to the other's losses. On the contrary, many opportunities exist to create mutually beneficial outcomes where cooperation yields advantages for both Polish and Ukrainian farmers and processors.

Several potential scenarios for integrating the Ukrainian agri-food sector with the EU market may be framed using game theory concepts:

Win–Win Scenario. Cooperation and Complementarity

- **Specialisation and division of roles.** Poland could focus on the production of higher value-added agricultural goods by leveraging its advanced processing infrastructure, while Ukraine could specialise in primary agricultural production.
- **Joint infrastructure investments.** Coordinated investments in transport, storage and logistics infrastructure could facilitate trade and boost the efficiency of both sectors.
- **Using Polish seaports for transporting Ukrainian agricultural goods.** This could generate benefits for Ukrainian agriculture and additional revenues for Poland.
- **Cooperation in research and development.** Joint research projects could lead to new agri-food technologies and improvements in food quality.
- **Creating agri-food clusters.** Clusters encompassing both Polish and Ukrainian enterprises could enhance international competitiveness.
- **Developing joint brands.** Poland and Ukraine could promote their agricultural products internationally under shared brands and quality labels, increasing product recognition and access to new markets.

- **Exchanging knowledge and experience.** Regular exchange between Polish and Ukrainian farmers, scientists and entrepreneurs could accelerate the modernisation of agriculture and food processing in both countries.
- **Joint research projects.** Funding for collaborative R&D in agriculture and processing could help develop more efficient and environmentally sustainable food production technologies.
- Supply chain development. Long-term cooperation between Polish and Ukrainian businesses could result in the formation of efficient supply chains, lowering production and distribution costs.

Additional benefits of cooperation include:

- **Enhanced food security.** Cooperation in food production would improve food security in both Poland and Ukraine, as well as the wider region.
- **Reducing poverty in rural areas.** Agricultural growth and the development of related sectors would contribute to alleviating rural poverty in both countries.
- **Strengthening bilateral relations.** Agricultural cooperation could strengthen bilateral ties between Poland and Ukraine and build greater trust between their citizens.

Win–Lose Scenario. Competition and Protectionism

- **Market competition.** In the absence of adequate regulatory mechanisms, intense competition may arise between Polish and Ukrainian producers over access to the same export markets.
- **Protectionism.** Certain interest groups in Poland may demand the introduction of protectionist measures such as tariffs or quantitative restrictions to shield domestic producers from Ukrainian competition.

Lose–Lose Scenario. Trade Barriers and Conflict

- **Administrative barriers.** Lack of clear and transparent regulations for agri-food trade between Poland and Ukraine may lead to the emergence of administrative obstacles that hinder trade.
- **Political tensions.** Deterioration of political relations between Poland and Ukraine could negatively impact cooperation in the agricultural sector.

Lose–Win Scenario. One-Sided Dependence

- **Ukraine's dependence on the Polish market.** Ukraine may become overly dependent on the Polish market, weakening its negotiating position.

- **Poland's dependence on Ukrainian raw materials.** Poland may become too reliant on Ukrainian inputs, increasing the risk of supply chain disruptions.

The most beneficial outcome for both sides would be a win–win scenario based on cooperation and complementarity. Achieving this goal requires coordinated actions, such as:

- **Regulatory harmonisation.** Alignment of production and trade regulations for agricultural and food products.
- **Joint investment.** Infrastructural investment in transport, storage and logistics.
- **Support for small and medium-sized enterprises.** Development support for SMEs in the agri-food sector.
- **Promotion of sustainable agriculture.** Implementation of environmentally and economically sustainable farming practices.

To summarise, agricultural cooperation between Poland and Ukraine promises significant potential but requires a strategic approach and strong bilateral engagement. Addressing challenges and seizing the opportunities of integration could benefit both Polish and Ukrainian farmers while enhancing regional food security.

However, a critical question remains: What are the main barriers to deeper agricultural cooperation between Poland and Ukraine? These include:

- **Differences in quality standards.** Despite Ukraine's alignment with EU norms, gaps in product quality persist, raising concerns among Polish consumers and producers.
- **Administrative barriers.** Complex customs, phytosanitary and veterinary procedures continue to hamper the free flow of goods.
- **Lack of trust.** Isolated incidents concerning the quality of Ukrainian imports have undermined Polish confidence. Polish farmers also express concern over the production capacity of large Ukrainian agroholdings.
- **Competition.** Fears of competition from cheaper Ukrainian products fuel protectionist sentiments and reinforce a sense of threat.
- **Infrastructure.** Underdeveloped transport and storage infrastructure limits the efficient movement of goods between the two countries.
- **Differences in agricultural policy.** Diverging agricultural policies make coordination and joint initiatives more difficult.

It is worth emphasising that expectations espoused by Polish and Ukrainian farmers may also complicate future cooperation.

- **Polish farmers expect:**
  - ◊ access to new export markets
  - ◊ access to raw materials and labour markets
  - ◊ stable agricultural prices
  - ◊ support for farm modernisation
  - ◊ access to new technologies
- **Ukrainian farmers expect:**
  - ◊ access to larger markets
  - ◊ selling goods at higher prices
  - ◊ financial support for modernisation, including foreign investment
  - ◊ technology transfer from Poland

Each scenario offers specific advantages and disadvantages. The first scenario is clearly the most favourable, yet also relatively less probable.

Scenario 1. Cooperation and Complementarity

Advantages:

- **Increased competitiveness.** Both economies would benefit from increased competitiveness through specialisation and economies of scale. Agri-food products from both countries would gain a stronger position in global markets, generating higher producer revenues and boosting exports.
- **Innovation.** Joint investments in research and development would accelerate the adoption of new technologies in agriculture and food processing. Climate change challenges could be addressed through joint efforts to develop plant varieties resistant to adverse environmental conditions.
- **Enhanced food security.** Resilience to price volatility and market disruptions would increase. Diversified production and mutual supplies would reduce vulnerability to natural disasters, armed conflicts or other crises that restrict food access.
- **Job creation.** Development of the agri-food sector would create jobs, especially in rural areas, not only in agriculture but also in food processing, logistics and related industries.
- **Stronger bilateral ties.** Agricultural and processing cooperation would foster improved relations between Poland and Ukraine.

Disadvantages:

- **Producer competition.** Direct competition over the same markets may intensify, particularly in border regions where producers from both countries compete for local customers, potentially leading to price reductions.
- **Dependence on external factors.** Cooperation remains exposed to global price fluctuations, political instability and armed conflicts. Ongoing political volatility in Ukraine could create uncertainty for Polish investors.
- **Developmental inequality.** Benefits may disproportionately favour larger enterprises with better access to financing, technology and markets, exacerbating existing inequalities and marginalising smaller producers.

Scenario 2. Competition and Protectionism

Advantages:

- **Innovation stimulus.** Competitive pressure could drive continuous product and technology improvement. Firms would invest in R&D, adopt precision agriculture and irrigation systems, as well as implement more efficient business models to gain a competitive edge.

- **Increased supply of agricultural inputs and lower consumer prices.** Competition may lead to lower food prices for consumers. With a higher supply of products on the market, consumers will benefit from a wider range of choices and will be able to purchase agricultural goods at more attractive prices.

Disadvantages:

- **Price wars.** Fierce competition may trigger price undercutting, squeezing producer margins. Selling below production costs could lead to the collapse of many SMEs and weaken market structures.
- **Trade restrictions.** Protectionism may result in reduced trade and rising product prices. Tariffs, quotas and other trade barriers raise production and distribution costs, which translates into higher prices for consumers and limits access to more competitive foreign products.
- **Market instability.** Protective actions may destabilise markets and create uncertainty for producers, making it harder to plan production and investment, which could result in lower output and higher unemployment in the sector.
- **Market concentration.** Intense competition may lead to market consolidation, with larger entities acquiring smaller ones, reducing competition and raising prices.
- **Retaliatory trade measures.** A protectionist response could trigger retaliatory action, escalating trade conflicts between the countries and hindering economic growth.

Scenario 3. Trade Conflicts and Barriers

Advantages:

No significant benefits. Trade conflicts and barriers primarily generate negative consequences for both the agricultural sector and the broader economy, including consumers.

Disadvantages:

- **Economic losses.** Trade barriers and conflicts result in economic losses for both countries, including reduced agricultural exports, lower producer incomes, higher consumer prices and limited investment opportunities in the agricultural sector.
- **Restricted development potential.** A lack of cooperation hinders the development of agriculture and related industries. Without the exchange of technology, knowledge and expertise, introducing innovation, improving

productivity and adjusting to changing market conditions becomes more difficult.

- **Escalation of political tensions.** Trade conflicts may fuel political tensions between Poland and Ukraine. Disputes over trade, quotas or other issues may erode mutual trust and hinder cooperation in other areas.
- **Market instability.** Trade barriers and conflicts contribute to market volatility. Agricultural prices become more unpredictable, complicating production planning and investment decisions.
- **Loss of market access.** Countries introducing trade restrictions risk losing access to new export markets, which may limit broader economic growth.
- **Threats to food security.** Trade disruptions may cause food shortages, particularly for products in which one country serves as the primary producer.

Scenario 4. One-Sided Dependence

Advantages:

- **Supply stability.** For a country dependent on agricultural imports, stable deliveries represent a key factor in ensuring food security, especially where domestic production cannot meet internal demand. However, food self-sufficiency in basic agricultural commodities and food products should remain guaranteed for each country.
- **Specialisation.** Dependence may lead to production specialisation. The importing country could focus on producing goods in which it holds comparative advantages, thereby improving overall efficiency and competitiveness.
- **Technology transfer.** Bilateral cooperation may facilitate the transfer of technology and know-how. The importing country could benefit from the exporter's experience in modern agricultural production and food processing methods.

Disadvantages:

- **Loss of autonomy.** Excessive dependence on a single trading partner may reduce negotiating capacity and expose a country to blackmail. The importing country may be forced to accept unfavourable trade terms, such as high prices or quantitative limits.
- **Risk of crisis.** If the exporting country experiences disruptions – due to droughts, plant or animal diseases (especially if reaching epidemic scale),

armed conflicts or policy changes – the importer may face serious supply chain issues and rising food prices.
- **Inequality in economic relations.** Dependence may result in economic asymmetry. The importing country becomes subject to the decisions of the exporter, undermining its economic sovereignty.
- **Exposure to external shocks.** Heavy reliance on a single supply source increases vulnerability to external shocks such as price fluctuations on global markets or the imposition of new trade barriers.

The most beneficial path remains cooperation and mutual complementarity. However, achieving this requires a broad set of actions to minimise risk and maximise shared benefits. This scenario, while promising, involves several **challenges**:

- **Building trust.** Trust between Polish and Ukrainian producers must be cultivated over time through transparency. Clear procedures for resolving trade disputes must be established.
- **Regulatory harmonisation.** Full alignment of regulations governing the production and trade of agricultural and food products should be pursued. Joint standards on product quality, food safety and environmental protection should be adopted, along with shared certification procedures to facilitate cross-border market access.
- **Infrastructure investment.** Modernisation of transport and storage infrastructure remains essential.
- **Support for small and medium-sized enterprises.** Strengthening SMEs in the agri-food sector should include assistance with market promotion, particularly in targeting new opportunities in African and Asian countries.

Recommendations

A key question arises: What recommendations should be developed for different stakeholder groups to ensure that Ukraine's potential accession to the European Union also brings benefits to Polish farmers and other participants in the agri-food market?[58] Both countries possess vast agricultural potential that can be fully leveraged through the synergy of their resources and capabilities. However, to achieve the expected outcomes of integration, comprehensive strategies must be designed and actions taken across multiple levels. The following set of recommendations is addressed to the main actors involved in the process: policymakers, entrepreneurs and non-governmental organisations.

Recommendations for policymakers:

- **Developing a joint strategy.** Formulating a common strategy for developing agricultural cooperation between Poland and Ukraine in the agri-food sector. This should include a detailed document outlining cooperation priorities in food production, agriculture and transnational vertical and horizontal integration in agribusiness, such as the development of organic farming, boosting exports of high value-added products, and supporting small family farms.[59]
- **Facilitating information flow.** Ensuring access to information on markets, technologies and financing opportunities. Launching a joint online platform offering market data, support programmes, regulations and industry events. For example, the platform could provide price data, market demand trends and training offers.

58 It is necessary to take into account not only farmers, but also the processing industry, consumers, social organisations, and environmental issues. Ukraine's economic integration with the EU market will affect the competitiveness of the agricultural and food sectors, alter the balance of power in the supply chain, and may create new investment and development opportunities.

59 This strategy should be consistent with the EU Common Agricultural Policy and its national implementations, including future CAP Strategic Plans, and should also take into account potential changes in trade policy as well as the competitiveness of the agricultural sector. Integrating it into the EU framework will enable more effective use of available support instruments for both Polish and Ukrainian producers. Moreover, the strategy should include mechanisms to mitigate potential market tensions, so that the process of integrating Ukraine's agriculture into the EU market does not lead to destabilisation in individual sectors, but instead creates room for synergy and mutual benefits.

- **Supporting cross-border initiatives.** Financial support for cross-border projects that promote development in border regions, such as joint research centres, business clusters or trade fairs. Relevant examples include ecological farming initiatives, farmer group development, and encouraging active involvement in producer organisations representing the shared interests of both countries.
- **Promotion of regional-level cooperation.** Incentives for cooperation between border regions through meetings between regional authorities to discuss joint investment projects, such as the construction of modern logistics centres for agri-food products.
- **Regulatory harmonisation.** Accelerating efforts to align regulations concerning the production, processing and trade of agri-food products. Developing joint quality standards and shared certification systems for meat, dairy, fruit and vegetables, as well as establishing common control bodies and procedures.
- **Strengthening cooperation on quality control.** Introducing joint procedures, more frequent quality checks and information sharing on threats to human and animal health to build consumer trust.

Recommendations for agri-food sector stakeholders:

- **Building cooperation networks.** Establishing networks linking Polish and Ukrainian businesses.
- **Investing in new technologies.** Investments in technologies that improve competitiveness in products and businesses, including joint R&D projects focused on innovations such as drones in agriculture, precision fertilisation, or biogas plant construction.
- **Promoting products in new markets.** Active promotion of products in both Polish and Ukrainian markets, as well as developing joint export channels in Asia and Africa. Creating and promoting a shared brand of agri-food products to enhance global recognition and association with Central and Eastern Europe.
- **Creating clusters.** Developing industry clusters bringing together enterprises within specific agricultural segments, such as soft fruit, vegetables, cereals or dairy products, enabling coordinated marketing, joint negotiations and investment initiatives.

Recommendations for non-governmental organisations:

- **Educating producers.** In addition to the formal education and advisory system, grassroots activities by agricultural organisations should include training and workshops for producers in both countries. These efforts

should be designed to dispel myths, reduce antagonism and populist narratives, build mutual trust and willingness to cooperate, and raise awareness of modern technologies, good agricultural practices and innovative food chain organisation solutions.

- **Supporting rural development.** Beyond policy mechanisms, NGOs can contribute to rural development through joint social and educational projects, as well as initiatives promoting local culture and folk traditions.
- **Promoting sustainable development.** Encouraging sustainable agricultural practices not only in economic terms but also in relation to social expectations and environmental protection, ultimately contributing to the alignment of production standards.
- **Raising public awareness.** Information campaigns aimed at raising public understanding of the strategic role of agriculture in the economy and food security.

Agricultural cooperation between Poland and Ukraine offers enormous potential that could benefit both producers and consumers. However, achieving this goal requires joint efforts at governmental, regional, business and civil society levels. Overcoming existing barriers and seizing the opportunities offered by integration could strengthen food security in the region and enhance the competitiveness of both economies.

Beyond the earlier recommendations, **the active involvement of farmers themselves constitutes a critical success factor in Polish–Ukrainian cooperation in agri-food production**. As direct food producers, it is farmers who drive this cooperation. The following set of guidelines is addressed specifically to farmers in both countries.

For Polish farmers:

- **Specialisation.** Focusing on specific products can improve competitiveness. Particular attention should be given to high value-added goods such as organic vegetables, berries or regional specialities.
- **Farm modernisation.** Investment in modern technologies – precision farming, irrigation systems, storage infrastructure – increases productivity and reduces costs.
- **Cooperation with processors.** Building long-term relationships with food processors secures stable demand for agricultural products and strengthens farmers' position in the food chain.

- **Expansion into eastern markets.** The Ukrainian market offers significant opportunities for Polish agricultural goods, especially those in short supply.
- **Participation in EU programmes.** Access to EU funding supports investment and entrepreneurship development in farms.
- **Quality promotion.** Emphasising product quality and obtaining relevant certifications (e.g. organic, regional) builds consumer trust and enables access to higher price segments.

For Ukrainian farmers:

- **Adaptation to EU standards.** Compliance with EU production requirements is essential for exporting to Poland and other EU Member States.
- **Production diversification.** Alongside traditional large-scale crop and raw material production, added-value initiatives and development of animal husbandry should be explored.
- **Eco-friendly agricultural practices.** Transitioning to environmentally friendly practices aligned with the Common Agricultural Policy can modernise Ukrainian agriculture during the accession process.
- **Cooperation with Polish farmers.** Joint ventures such as cooperatives or consortia can improve access to new technologies and markets.
- **Promotion of regional products.** Ukrainian regional specialities feature significant potential in Poland and should be marketed by highlighting their unique characteristics and origin.
- **Participation in training programmes.** Education in modern agricultural technology, marketing and business management is essential for long-term success.

Polish–Ukrainian cooperation:

- **Creating agricultural clusters.** Linking producers, processors and research institutions can accelerate development across the entire sector.
- **Joint R&D projects.** Collaborative research on new crop varieties, cultivation methods and processing techniques can yield innovative solutions.
- **Joint product promotion.** Promoting goods from both countries under shared brands can boost recognition in international markets.
- **Knowledge exchange.** Conferences, seminars and study visits facilitate the transfer of know-how between farmers from both countries.

These recommendations outline an optimistic scenario in which Polish–Ukrainian cooperation in the agri-food sector generates tangible benefits for

both sides. **However, such cooperation risks remaining merely aspirational if not supported by appropriate action at national and international levels.**

The global agricultural market is highly dynamic, characterised by immense potential but also significant challenges. **Overproduction of agricultural goods, rising competition from other countries and changing climatic conditions all complicate the development of Polish–Ukrainian cooperation.** There is a risk that more competitive Ukrainian farms may view Polish producers as less attractive partners – or even direct competitors. Higher productivity and access to advanced technologies, especially when reinforced by integration support, could result in unequal competition. This may shift the relationship from cooperation to rivalry, undermining trust and limiting the benefits of partnership. Avoiding such outcomes requires identifying common interests, implementing joint projects and reinforcing institutional-level cooperation.

Conclusion

The opportunities and threats associated with Ukraine's potential EU membership bear significant implications for Poland's agri-food sector. With its abundant natural resources and substantial production capacity, Ukraine may become both a key trade partner and a serious competitor. This analysis was developed in this very context, aiming to assess the possible consequences of Ukraine's integration into the EU and its impact on Polish agriculture. Contemporary challenges facing the agri-food sector – climate change, intensifying competition and growing emphasis on sustainability – demand rigorous analysis and strategic responses. This study plays a key role in supporting political decision-makers, farmers and agri-food businesses in understanding the challenges and opportunities ahead.

The main goal of the study – **assessing the potential implications of Ukraine's EU accession for Poland's agri-food sector** – enabled an in-depth analysis of market integration effects on critical agricultural domains, such as cereal, vegetable, fruit and meat production, as well as the competitiveness of Polish farms and processing industries. The study identifies areas of integration with the greatest potential for benefit and those posing the most serious risks. It also assesses the impact on various types of producers – from large-scale farms to small family holdings – and the broader international trade in agri-food products between Poland, Ukraine and other EU Member States.

The study presents a detailed analysis of seven key areas of integration's impact on the Polish agri-food sector:

- **Identification of sectors most exposed to integration.** Focus on cereals, vegetables, fruits and meat – sectors in which integration will have the strongest effect. Poland, as one of the EU's leading agricultural producers, must prepare for increased competition, particularly in raw materials where Ukraine holds a strong position. Simultaneously, opportunities arise for cooperation in production and processing.
- **Opportunities and threats of agri-food market integration.** Ukraine's integration with the EU's agricultural market may offer Poland benefits such as cheaper raw materials and new avenues for technological cooperation. However, price pressure – especially on smaller farms – and the

scale of Ukrainian agroholdings pose serious risks, as Polish farms may potentially be unable to compete with Ukrainian mass production. The lifting of Ukraine's land sale moratorium may exacerbate land concentration issues within major agroholdings.

- **Impact on the competitiveness of Polish farms and processing.** Integration may both enhance and weaken the competitiveness of the Polish agri-food sector. Large enterprises could benefit from access to lower-cost inputs from Ukraine, improving their position on the EU market. However, Polish farmers – particularly smallholders – may face difficulties competing with inexpensive Ukrainian products, which could lead to the marginalisation of certain segments.
- **Impact on different producer groups.** Market integration will affect large-scale farms and small family farms in different ways. Larger entities will gain greater capacity for expansion, while smaller family-run farms may struggle to compete with more efficient and better-resourced Ukrainian operations. Targeted support for smaller farmers is therefore essential to ensure they can grow and remain competitive.
- **Changes in the structure of agricultural production.** Integration with Ukraine may shift Poland's agricultural focus toward higher value-added products. As a leading food processing country, Poland could strengthen its processing sector, while Ukraine supplies raw materials. This scenario, however, requires investment in innovation and technology to increase the value added within Polish agriculture.
- **Impact on trade in agri-food products.** Integration is likely to intensify trade between Poland and Ukraine, as well as with other EU countries. Poland could benefit from access to Ukrainian raw materials at lower costs, reinforcing its role as an exporter of processed goods. At the same time, increased competition in EU markets from low-priced Ukrainian products may displace local producers.
- **Adjustment of agricultural policy in Poland. The analysis indicates that Poland must adapt its agricultural policy to the new market realities. New support programmes will be necessary, especially for small farms, to enable them to compete with large Ukrainian enterprises. Revisions to existing agricultural policy tools should also incorporate support for innovation, sustainability and environmental protection. These reforms must be coordinated with EU support mechanisms to ensure effective integration management and maximise the benefits for both Polish and Ukrainian agriculture.**

In our view, this study provides an important contribution to the debate on the future of Polish agriculture in light of the potential enlargement of the European Union to include Ukraine. It offers credible and comprehensive analyses that can help Polish farmers, business owners and policymakers better understand the challenges and opportunities arising from this process. In the long term, such integration could significantly reshape the structure of agricultural production in Poland, requiring flexibility and readiness to respond to new market conditions.

Підсумки

Загрози й можливості, пов'язані з потенційним членством України в Європейському Союзі, мають велике значення для польського агропродовольчого сектору. Україна, що володіє багатими природними ресурсами і значним виробничим потенціалом, може стати як ключовим торговельним партнером, так і серйозним конкурентом для Польщі. Саме в цьому контексті було проведено це дослідження, метою якого стало оцінювання можливих наслідків інтеграції України до ЄС та її впливу на польське сільське господарство. Сучасні виклики, що постають перед агропродовольчим сектором, такі як зміни клімату, зростання конкуренції і збільшення значущості сталих практик, потребують точного аналізу та відповідних стратегій. Тому це дослідження є важливим як для політиків, так і для фермерів та підприємств агропродовольчої галузі.

Головна мета роботи – оцінка потенційних наслідків членства України в Європейському Союзі для польського агропродовольчого сектора – була повністю досягнута. Аналіз дозволив детально вивчити вплив інтеграції ринків на ключові сільськогосподарські сектори, такі як виробництво зернових, овочів, фруктів і м'яса, а також на конкурентоспроможність польських ферм і переробної промисловості. Дослідження, зокрема, показує, які сфери інтеграції можуть принести найбільші переваги, а які несуть серйозні загрози. Також зроблено спробу оцінити вплив інтеграції на різні групи виробників – від великих ферм до малих сімейних господарств – і на міжнародну торгівлю агропродовольчою продукцією між Польщею, Україною та іншими країнами ЄС.

Дослідження детально аналізує сім ключових аспектів впливу інтеграції на польський агропродовольчий сектор:

- **Ідентифікація ключових секторів впливу інтеграції.** Тут проаналізовано сектори сільського господарства, які можуть бути найбільш вразливими до впливу інтеграції, такі як виробництво зернових, овочів, фруктів і м'яса. Польща як один із найбільших сільськогосподарських виробників у ЄС має підготуватися до посилення конкуренції, особливо в сфері сільськогосподарської сировини, де Україна займає сильні позиції. Водночас відкриваються

можливості для співпраці у виробництві та торгівлі, особливо в переробному секторі.

- **Можливості та загрози інтеграції агропродовольчого ринку.** Інтеграція України в аграрний ринок ЄС може принести Польщі значні переваги, такі як дешевша сировина й нові можливості для технологічної співпраці. Однак існує також ризик цінового тиску на польських виробників, особливо на малі господарства, які можуть не витримати конкуренції з дешевшими українськими продуктами. Скасування мораторію на продаж землі в Україні може поглибити проблему концентрації земель у руках великих агрохолдингів.
- **Вплив на конкурентоспроможність польських ферм і переробної промисловості.** Інтеграція може як підвищити конкурентоспроможність польського агропродовольчого сектору, так і її ослабити. Великі підприємства можуть скористатися дешевшою сировиною з України, що підвищить їхню конкурентоспроможність на ринку ЄС. Однак польські фермери, особливо малі, можуть зіткнутися з труднощами в конкуренції з дешевими українськими продуктами, що може призвести до маргіналізації частини з них.
- **Вплив на окремі групи виробників.** Інтеграція ринків по-різному вплине на великі ферми і малі сімейні господарства. Великі підприємства матимуть більше можливостей для розширення, тоді як малі сімейні ферми можуть зіткнутися з труднощами в конкуренції з більшими та більш конкурентоспроможними суб'єктами з України. Тому необхідна підтримка для малих фермерів, щоб забезпечити їм можливість розвитку та конкуренції.
- **Зміни у структурі сільськогосподарського виробництва.** Інтеграція з Україною може призвести до зміщення виробництва в Польщі в бік продукції з більшою доданою вартістю. Польща як провідна країна у сфері переробки харчових продуктів може виграти від зміцнення переробного сектора, тоді як Україна буде постачати сировину. Однак такий сценарій потребує інвестицій в інновації і технології, що дозволять збільшити додану вартість у польському сільському господарстві.
- **Вплив на торгівлю агропродовольчою продукцією.** Внаслідок інтеграції можна очікувати інтенсифікації торгівлі між Польщею, Україною та іншими країнами ЄС. Польща може отримати вигоду від доступу до української сировини за нижчими цінами, що зміцнить її позиції як експортера переробленої продукції. Однак варто врахувати можливість посилення конкуренції на ринках ЄС, де дешеві українські продукти можуть витісняти місцевих виробників.

- **Адаптація аграрної політики у Польщі.** Аналіз показує, що Польща буде змушена адаптувати свою аграрну політику до нових ринкових умов. Необхідно буде впровадити нові програми підтримки для фермерів, особливо для малих господарств, щоб вони могли конкурувати з великими суб'єктами з України. Модифікація існуючих інструментів аграрної політики повинна також охоплювати підтримку інновацій, сталого розвитку й охорони навколишнього середовища.

На нашу думку, це дослідження є важливим, оскільки воно робить значний внесок у дискусію про майбутнє польського сільського господарства в контексті розширення ЄС за рахунок України. Воно надає надійні і всебічні аналізи, які можуть допомогти польським фермерам, підприємцям і політикам краще зрозуміти виклики та можливості, що випливають із цього процесу. У довгостроковій перспективі ця інтеграція може суттєво вплинути на структуру сільськогосподарського виробництва в Польщі, вимагаючи гнучкості й готовності до змін відповідно до нових ринкових умов.

Biographical notes

Edwin Bendyk is the President of the Stefan Batory Foundation. He is a journalist, writer, and columnist for the weekly Polityka. His work focuses on civilisational issues and the relationships between science, technology, politics, the economy, culture, and social life. He co-founded the Center for Future Studies at Collegium Civitas and is a member of the European Council on Foreign Relations. He has published several books, including *Miłość, wojna, rewolucja. Szkice na czas kryzysu* (*Love, War, Revolution: Essays for a Time of Crisis*, 2009), *Bunt sieci* (*The Network Revolt*, 2012), and *W Polsce, czyli wszędzie. Rzecz o upadku i przyszłości świata* (*In Poland, or Anywhere: On the Collapse and Future of the World*, 2020). He also runs the blog Antymatrix.

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In times of threats and crises, concerns over food take on particular importance, prompting discussions on whether striving for the greatest possible food sovereignty should be part of security policy. It is therefore hardly surprising that agriculture arouses greater emotions than its position in the national economy might suggest. We saw this in 2023, when farmer protests broke out across Europe against the EU Green Deal policy and the opening of borders to agricultural production from Ukraine. In Poland, these protests took the form of a months-long blockade of Polish–Ukrainian border crossings. The scale of the protests, their duration and the high level of social support they received demonstrated that obstacles may emerge in the process of Ukraine's accession to the European Union that could slow integration, even though EU enlargement objectively serves the interests of Poland and other European countries. To avoid this, reliable knowledge of Ukrainian, Polish and EU agriculture is necessary, allowing us to reach beyond a confrontational model of conversation and replace it with a discussion based on arguments facilitating efforts to leverage potential cooperation, making use of the strongest features of the agricultural sector in Poland and Ukraine. This is the purpose of this study. The report *Divided Harvests* by Wawrzyniec Czubak, Sławomir Kalinowski and Vitaliy Krupin provides a comprehensive assessment of the potential effects that Ukraine's EU membership could have on the Polish agri-food sector. It offers an analysis of the opportunities and threats associated with this process, essential for developing effective political and economic strategies that will help Polish farmers and entrepreneurs maximise potential benefits while minimising risks.

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