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The Ukrainian agricultural sector: an overview and challenges in light of possible European Union enlargement

Elsa Régnier, Aurélie Catallo (IDDRI)

Agricultural negotiations are considered to be one of the most difficult stumbling blocks in the process of European Union (EU) accession due to the importance of the sector's *acquis communautaire*, the significance of the Common Agricultural Policy (CAP) in the European budget, and the vulnerability of farms to intra-Community competition. The sensitivity surrounding the prospect of enlargement, which is perceived as an additional ordeal by an already fragile farming community, was demonstrated in 2022 by the hostile response of many European farmers to the influx of duty-free Ukrainian products into the common market.

However, the debate on the very nature of Ukrainian agriculture, its dynamics and its relationship with the EU has remained low key until now. This *Study* addresses these issues in order to inform the discussions that are starting at the European level, not only as part of the negotiations on Ukraine's accession to the EU, but also with regard to the next Multiannual Financial Framework (MFF) and the post-2027 CAP. Indeed, the issue of enlargement to include Ukraine is likely to play a major role in the framing of the next MFF and the next CAP, on which negotiations will begin next year.

KEY MESSAGES

Ukrainian agriculture is structured around three models, which do not perform the same functions or have the same environmental impact:

- Rural households ensure the country's food security;
- Large agricultural enterprises dominate the production of cereals and oilseeds for export, and represent the main source of foreign currency for the authorities;
- Family farms, which account for more than half of the country's commercial producers, are now threatened by the concentration of agricultural enterprises in Ukraine.

In addition to the benefits of integration into the common market and access to European programmes, including the CAP, eventual EU membership represents a number of challenges for Ukraine–political, administrative, logistical and economic–which will have to be met in parallel with its reconstruction. Among other things, it will speed up the process of bringing Ukrainian agricultural production up to European standards. And these dynamics should help shape the future Ukrainian agricultural sector.

For the EU, the prospect of Ukraine's accession exacerbates pre-existing points of tension, including:

- the size and distribution of the EU budget;
- a potential major reform of the CAP;
- the capacity of the European agricultural sector to cope with an influx of Ukrainian agricultural products exempt from customs duties.

In the event of EU enlargement to include Ukraine, the consequences for European agriculture and the political balance within the EU would be mainly structured around three issues, which are currently being addressed:

- the structure of Ukraine's post-war agricultural sector, which depends on its reconstruction policies, as the war has caused considerable damage to this sector;
- the conditions set out in the Accession Treaty;
- EU reforms, adopted in preparation for enlargement, pertaining to the institutions and decision-making mechanisms, the MFF and the CAP.

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1. INTRODUCTION

Agricultural negotiations are considered to be one of the most difficult stumbling blocks in the process of European Union (EU) accession, due to the importance of the *acquis communautaire* in agriculture–which remains one of the most integrated sectors at the European level–and also because of the significance of the Common Agricultural Policy (CAP) in the European budget–which accounts for one third of expenditure–and the vulnerability of farms to intra-Community competition. The pressure and difficulties associated with such negotiations are intensified when the candidate country is a major agricultural power, as illustrated by the precedents of Spain and Poland (Albaladejo Román, 2024).

Ukraine, which officially applied for EU membership just days after the Russian invasion at the end of February 2022, is undoubtedly a major agricultural power–due to the size of its territory, its fertile land and the competitiveness of some of its sectors on the international market. Ukraine's possible EU accession is already causing apprehension among many farmers and agricultural stakeholders, who fear competition from Ukrainian production within the common market. The influx of agricultural commodities into Europe, following the provisional lifting of tariff barriers in June 2022, and the reactions that this has provoked in the agricultural world, are a reliable harbinger of the tensions that could arise if Ukraine joins the common market without reform or support from both parties.

These issues are addressed in the final section of this *Study*, which looks at (i) the need to reform the CAP and the European budget in the event of Ukraine's accession, (ii) the stakes for the European and Ukrainian agricultural sectors in the event of enlargement, and (iii) the political balances that could result within the EU. To fully understand the scope of the questions raised by this last part, the preceding sections provide an overview of the Ukrainian agricultural sector (section 2), the factors of competitiveness and the social and environmental limits of export-oriented farms (section 3) and the development of agricultural sector trade relations between Ukraine and the EU (section 4).

This overview of Ukrainian agriculture must not obscure the situation in which the country currently finds itself: a devastating war causing immense human suffering and material costs, including major impacts on the agricultural sector, which are continuing to escalate.

2 DIVERSITY OF UKRAINIAN AGRICULTURE: FARMING MODELS WITH DIFFERENT ECONOMIC AND SOCIAL FUNCTIONS

The agricultural sector is central to the country's economy, accounting for 10% of GDP, nearly 15% of employment and 40% of exports (Table 1). Rural development in Ukraine is closely linked to that of agriculture, which remains the main income source for people in rural areas, where a third of the population live.

TABLE 1. Importance of agriculture in the Ukrainian, French and European economies (2021)

	Ukraine	France	EU
Agriculture in GDP (%)	10.6	1.6	1.6
Agriculture share in employment (%)	14.7	2.7	3.8
Agri-food exports (% of total exports)	40.6	9.1*	8.9
Agri-food imports (% of total imports)	9.5	7.2*	5.9

* Agriculture and agri-food industries

Source: France https://www.insee.fr/fr/statistiques/7728901?sommaire=7728903, https://www.insee.fr/fr/statistiques/2381436; https://www.insee.fr/fr/statistiques/2381436#figure1_radio2; Ukraine and the EU: OECD (2023). *Agricultural Policy Monitoring and Evaluation 2023: Adapting Agriculture to Climate Change*. OECD Publishing.

Ukrainian agriculture, like that of many former Soviet countries, is often presented as a twofold structure: very large farms of several hundred thousand hectares coexisting with small farms of a few hectares at most. This binary perspective actually conceals a diversity of farms of varying sizes, statuses and orientations.

2.1. Models with distinctive features

Official Ukrainian statistics distinguish between farms registered as commercial enterprises and semi-subsistence small farms that are organized around the household and not subject to registration. There are between 4 and 5 million rural households in Ukraine, accounting for 32.1% of the country's production. They cultivate almost a fifth of the country's arable land (SSSU, 2021) in fields that are mostly less than a hectare in size.[1] Commercial agricultural enterprises account for 67.9% of production, an increase of more than six percentage points since 2015 (SSSU, 2022).

Agricultural enterprises can be classified into different categories. Until 2018, official Ukrainian statistics distinguished between "farms" (not to be confused with rural households) and other agricultural enterprises.[2] Since then, a single category has come to encompass all of the 40,000 or so enterprises involved in agricultural production in Ukraine, despite significant differences in size (Table 2), management and farming practices (in terms of capital intensity and level of technology used). The various reports and studies on the subject generally identify three categories: family farms, so-called "first-generation" agricultural enterprises, and agroholdings–or so-called "second-generation" agricultural enterprises (Cochet *et al.*, 2010).

TABLE 2. Ukrainian agricultural enterprises according to size *

Size (in hectares)	Number of enterprises	Share (%)	Surface area in thousands of hectares	Share (%)
< 10	3,593	9.2	20.1	0.1
10-50	12,496	31.8	400.6	1.9
50-100	5,167	13.2	373.4	1.8
0-100	*21,256*	*54.2*	*794.1*	*3.8*
100-500	9,371	23.8	2,290.3	11
500-1000	3,228	8.2	2,314.1	11.1
1000-5000	4,845	12.3	10,150.4	48.8
>5000	601	1.5	5,273.8	25.3

* This table does not include rural households.

Source: from SSSU (2022). *Statistical Yearbook of Ukraine—2021.* State Statistics Service of Ukraine.

Family farms are the smallest: their average size is between 50 and 100 hectares, which makes them similar to French farms, which average 68.6 hectares. These farms rely mainly on the work of family members. First-generation agricultural enterprises are several hundred or even thousands of hectares in size. These farms are directly descended from former Soviet structures (section 2.2). Agroholdings or second-generation agricultural enterprises are the largest: they can cover several hundred thousand hectares, typically comprising a parent company that controls several production sites of several thousand hectares (often first-generation agricultural enterprises). Agroholdings are horizontally integrated, meaning that they control the entire value chain from production to export, as part of a highly concentrated model: the 10 largest agroholdings control 2.6 million hectares of farmland, or 8% of Ukrainian arable land (Mamonova *et al.*, 2023a).

The technical practices and orientations of agricultural enterprises, particularly commercial farms, and rural households are very different. The former have specialized over the last two decades in the production of cereals and oilseeds for export; they are characterized by very little diversification and high mechanization. Maize, wheat and barley make up 97% of cereals produced, while sunflower, rapeseed and soya account for 99% of oilseeds (Matuszak, 2021). With the exception of chicken and, to a lesser extent, pork, farmers have turned away from livestock production due to the higher cost of entry into these sectors. The quantity of chicken produced has risen from 193,000 tonnes in 2000 to 1.4 million tonnes in 2020 (Bogonos *et al.*, 2024) –by way of comparison, European production stands at 13.6 million tonnes (DG Agri, 2024b). Chicken production is highly concentrated in Ukraine: six companies are responsible for 90% of production (USDA, 2024).

In contrast, rural households are made up of small mixed livestock farms, which farm for individual consumption and for sale at outdoor markets. They are responsible for the bulk of potato, vegetable, fruit and berry, milk and beef production (Figure 1; Mamonova *et al.*, 2023a). They rely mainly on manual labour from family members–only 22% have access to machinery and agricultural equipment–and use little in terms of synthetic inputs or fuel, and are generally part of local supply chains (sales and purchases).

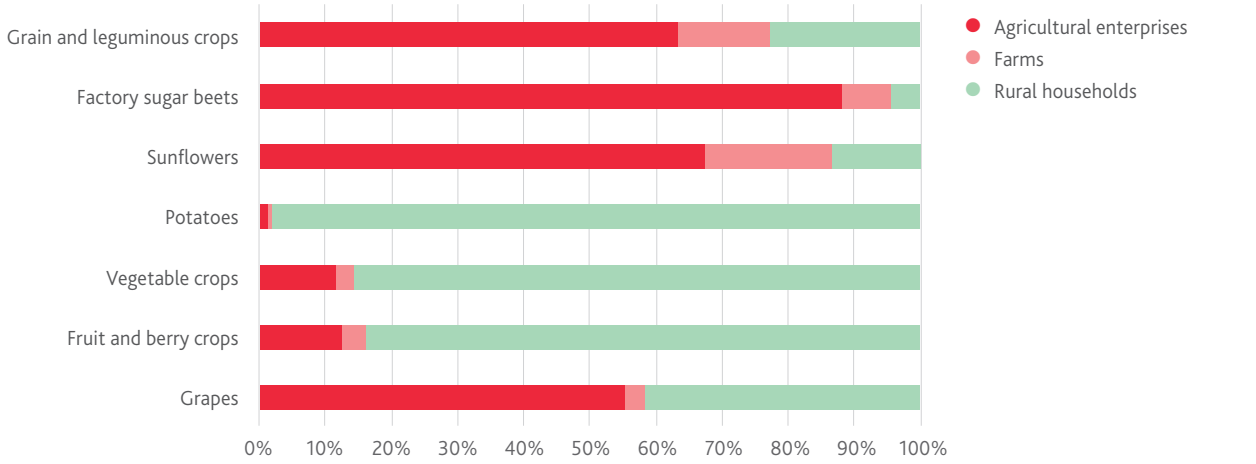
These different models play different roles in the Ukrainian economy. While rural households ensure the country's food security, agricultural businesses are the main providers of foreign currency. More than 40% of Ukrainian exports come from the agricultural sector, which had a trade balance of €17.8 billion in 2021 (DG Agri, 2022). This proportion has grown even more since the Russian-led war has extended across the whole of Ukraine: in 2023, agri-food products accounted for 60% of Ukrainian exports (Konończuk *et al.*, 2023). This financial windfall seems particularly significant in the current context, given the extent of the requirements needed to rebuild the country (Box 1).

This is why agricultural businesses are favoured by the public authorities, which support them through advantageous taxation (Nivievskyi *et al.*, 2023), however, the place and perception of commercial farms in Ukrainian society are more ambiguous, stemming at least partly from the country's Soviet past.

[1] In 2021, 78.2% of rural households were smaller than one hectare, 20.4% between 1 and 10 hectares and 1.4% larger than 10 hectares. See: https://ukrstat.gov.ua/operativ/operativ2018/sg/opsgd/arch_oschd_e.htm

[2] The Ukrainian statistical yearbooks for 2007 to 2021 are available at: https://ukrstat.gov.ua/druk/publicat/Arhiv_u/01/Arch_zor_zb.htm

FIGURE 1. Crop production, according to farm type (2017)



Source: from SSSU (2018). Statistical Yearbook of Ukraine—2017. State Statistics Service of Ukraine.

BOX 1. ECONOMIC IMPACT OF THE WAR ON UKRAINE'S AGRICULTURAL SECTOR

The agricultural sector has been particularly badly hit by Russia's war. A joint report by the Kyiv School of Economics and the World Bank estimates losses and damage in this sector at $80 billion (Neyter *et al.*, 2024). This is mainly due to the destruction of agricultural machinery, storage facilities and crops, as well as the opportunity costs associated with the fall in production. These opportunity costs have arisen due to the occupation and destruction of farmland (Table 3), lower yields, higher input prices and logistical costs (difficulties with storage and access to Black Sea ports) and a lack of available labour. It is thought that a combination of these factors has led to 7% of commercial farms ceasing operations in the first year of the war (Mamonova *et al.*, 2023a). The authors of this report estimate the cost of rebuilding the sector at $56 billion over 10 years.

2.2. Coexistence between commercial farms and rural households: a Soviet legacy

During the Soviet period, the fields around villages were regrouped and collectivized on a huge scale into *kolkhozes* and *sovkhozes*.[3] Villagers worked within these structures and were also authorized to engage in subsidiary farming on household plots. They were permitted to sell a proportion of this production outside of official channels. This agricultural activity played a central role in the subsistence of families, particularly during shortages or economic crises. These two agricultural models were conceived symbiotically: villagers-peasants would not only receive wages in return for their work on the collective farm, they would also benefit from advantageous rates on feed, from the right to allow their herds to graze collective pastures, and from ploughing equipment provided by the *kolkhoz* or *sovkhoz*. These structures also played social and cultural roles in village life, for example by setting up sports clubs, maintaining communal areas, and organizing film screenings.

This dynamic of co-dependence between large agricultural enterprises, directly descended from former Soviet farms, and rural households was reformulated during the 2000s. Peasants, who sometimes continued to work within these enterprises, in addition to cultivating their plot, started to receive a small rent for their land (Box 2). This rent was often paid in kind–grain and fodder, building materials, ploughing of the plot. Large farms are also continuing the social role once played by *kolkhozes* and *sovkhozes*: helping to build playgrounds and maintaining public spaces (DG Trésor, 2021).

The social acceptance of very large farms in Ukraine is greatly influenced by this Soviet heritage which, until 2014, was a source of nostalgia for a proportion of the population. Agricultural enterprises are still commonly referred to as "*kolkhozy*" and "*sovkhozy*", showing that the link between very large farms and Soviet structures remains present in the collective imagination (Mamonova, 2018). Furthermore, villager-peasants do not feel threatened by these farms: they do not produce the same foods (see Figure 1) and for a long time they considered their own activities as subsidiary.

Indeed, although central to the country's food security, semi-subsistence farming, apart from being ignored by public authorities (Cochet *et al.*, 2021), has long been regarded as marginal by villagers, who do not consider their farming activity to be commercial–despite the fact that some of their produce is sold at outdoor markets.

[3] The former are collective-owned farms operating on state-owned land, while the latter are state-owned farms.

BOX 2. AGRICULTURAL LAND IN UKRAINE

During the 1990s, agricultural land was redistributed to former *kolkhoz* and *sovkhoz* workers, each receiving a plot averaging four hectares (the area varied depending on the region and commune, ranging from a few dozen metres to almost ten hectares): the *pai*. The *pai* consisted of both the plot of land adjoining the household and part of the land from the *kolkhozes* and *sovkhozes*. While agricultural land was distributed fairly, this was not the case for agricultural capital (machinery, livestock, storage warehouses, etc.). As a result, even though many farmers received fields of several hectares, very few were able to start cultivating this land, which was located outside the village within a complex of several hundred hectares and often difficult to access. In 2001, a temporary moratorium was introduced on the sale of land due to the risks of concentration of land ownership and an unprepared market (lack of a land register, weaknesses in the rule of law, etc.). This led to millions of hectares becoming available to rent, allowing investors to lease very large holdings at low cost for long periods (the duration of leases was not regulated until 2015). From July 2021 onwards the moratorium was gradually lifted: individuals of Ukrainian nationality became eligible to buy up to 100 hectares of land and, from 1 January 2024 companies with registered offices in Ukraine (preventing foreign investors from owning a stake) were able to buy farmland of up to 10,000 hectares.

2.4. A twofold reconstruction since 2014: the revival of rural households and a decline in family farms in favour of agroholdings

Researcher Natalia Mamonova (2018) identified the year 2014 as a turning point. Following the Russian invasion of eastern Ukraine, the country's economic situation rapidly deteriorated and the poverty rate increased, while survival strategies were implemented: many households increased their production of potatoes and vegetables. The centrality of this type of farming to the survival of Ukrainians has been accompanied by an increase in its value: once regarded as a relic that was destined to be replaced in the near future by large-scale mechanized farming, semi-subsistence farming is making a comeback as an increasing number of Ukrainians now see it as central to the country's identity and the revitalization of its villages. The attachment of Ukrainians to local and quality production has grown (DG Treasury, 2021) as appreciation for the "ecological cleanliness" of small farm produce increases (Mamonova, 2018).

At the same time, family farms and, to a lesser extent, first-generation agricultural enterprises are undoubtedly those on which agroholdings have the biggest impact. These structures are in direct competition for outlets (Figure 1) and access to land. With more capital at their disposal, agroholdings acquire the best land at the expense of family farms, which limits their scope for expansion. The latter face major difficulties in accessing finance, as loans are generally unavailable to farms of less than 500 hectares (Nivievskyi *et al*., 2023), restricting their ability to develop and compete with agroholdings.

In short, Ukrainian agriculture is structured around three models, which vary in terms of farming practices and capital intensity. The first of these are agricultural enterprises, which can be subdivided into two categories–agroholdings, which bring together several production sites, and first-generation agricultural enterprises, directly descended from former Soviet structures; the second type are family farms–which represent more than half of Ukrainian agricultural enterprises, but are now threatened by the increasing concentration of Ukrainian commercial agriculture; and lastly, rural households, which direct a proportion of its production to local markets. This very high level of specialization, which partly explains the competitiveness of Ukrainian agriculture on the international stage, faces social and environmental limitations.

3. AGRICULTURAL ENTERPRISES: A COMPETITIVE MODEL WITH ENVIRONMENTAL, SOCIAL AND ECONOMIC WEAKNESSES

3.1. Competitiveness factors for Ukraine's large agricultural enterprises

The competitiveness of Ukrainian agriculture is based on several factors. The first is natural. Ukraine has a large agricultural area with soil and climate conditions that are highly favourable to production. In 2021, the country had 41 million hectares of utilized agricultural area (UAA), including 33 million hectares of arable land, half of which is chernozem, a type of soil that is extremely rich in organic matter and requires very little tillage or fertilizer. In comparison, France, which has the largest UAA in Europe, has a surface area of 27.4 million hectares, including 17 million hectares of arable land (Table 3). Ukraine also benefits from climatic conditions that are favourable to agricultural production–with the exception of the south of the country, which suffers from low rainfall, although this has been partially addressed by the construction of two canals in the 1980s (Matuszak, 2021).

TABLE 3. Comparison of Ukrainian, French and European agricultural areas

	Ukraine (2021)	Ukraine (2023)	Mainland France (2020)	EU (2020)
Total surface area (in M ha)	60.4	46.8	54.9	409.9
UAA (in M ha)	41.3	31.7	27.4	157.4
Arable land (in M ha)	32.9	25.2	17	98

Source: EU and France: Eurostat, Key Figures on the European Food chain–2023 Edition; Ukraine: Bogonos, M. *et al.* (2023). Agricultural Outlook Ukraine 2024-2033. Report-summary. KSE.

The competitiveness of Ukrainian agriculture is also based on low production costs: farmland is available at low prices and in large quantities, it is rich in organic matter–therefore needing less fertilizer–and labour costs are low. Furthermore, a considerable amount of land has already been divided up into fields of several hundred hectares (section 2.2). Finally, although Ukrainian agriculture is not heavily subsidized, agricultural companies specializing in cereal and oilseed exports are supported by the public authorities–through advantageous taxation, the establishment of trade agreements and various services (contract facilitation, links with international funding bodies, market price monitoring, etc.) (Mamonova *et al.*, 2023b).

3.2. "Classic" agricultural development based on simplification and concentration

While Ukraine is undeniably a major agricultural exporter, this model nevertheless has environmental, social and economic deficiencies, which can be understood in light of the development rationale for commercial farms in the 2000s.

The development of these very large farms, particularly second-generation farms, was driven by Ukrainian and foreign investors, attracted by the high yields offered by Ukrainian agriculture during the 2000s, at a time when food prices were high and the costs to enter the sector were low. Based on a drive for profit, these farms moved towards intensive production of cereals and oilseeds (Box 3), reducing the diversity of Ukrainian crop rotation, abandoning the less profitable production of pulses (with the exception of soya) and livestock farming–which are associated with higher initial costs (Matuszak, 2021; Moldavan *et al.*, 2023). The share of livestock in Ukrainian agriculture has fallen from 41% in 2000 to 22% in 2020 (OECD, 2022). Cattle production, one of the most affected sectors, has fallen by 72% in 20 years and is still mainly provided by rural households–although some companies are gradually taking over milk production (SSSU, 2022; Bogonos *et al.*, 2023). Fodder crops have also fallen sharply, from 7 million hectares in 2000 to 1.5 million in 2021 (SSSU, 2022).

These trends have resulted in an organic matter deficit, which has been partially offset by a steep increase in synthetic fertiliser use over the past 20 years (Levasseur, 2022; Mamonova *et al.*, 2023b): the nitrogen surplus is 18.8 kg/ha (this figure is 48.9 kg/ha at the European level); while the phosphorus balance is negative at -2.5 kg/ha (+1.8 kg/ha at the European level) (OECD, 2023). These figures raise concerns about long-term sustainability because phosphorus plays a central role in maintaining the fertility of agricultural production systems, and phosphate-based mineral fertilizer production is limited worldwide (Demay *et al.*, 2023). Furthermore, excess nitrogen has many negative consequences for the natural environment (water pollution, greenhouse gas emissions, disruption of terrestrial and aquatic ecosystems, impact on soil microorganisms). In addition to issues of soil fertility and the pollution of exposed environments, these technical changes contribute more widely to the impoverishment of the country's diverse landscapes and biodiversity (Mamonova *et al.*, 2023b; Moldavan *et al.*, 2023).

From a social perspective, the development of commercial farms, which are based on higher labour productivity (the most modernized farms employ only seven to ten workers per thousand hectares), is contributing to a demographic crisis in the Ukrainian countryside (Gagalyuk *et al.*, 2022). In addition, these very large organizations only provide 20% of agricultural jobs in rural areas, even though agriculture remains the main source of income in the countryside. Indeed, the income generated by these farms mainly provides return on capital, which accounts for between 79% and 89% of added value (Cochet *et al.*, 2010).

From an economic standpoint, exported products have low added value–they are little or not at all processed–and there is a lack of diversity: eight products make up 75% of the value of agricultural exports, of which around one third is maize, one quarter is sunflower oil, and a fifth is wheat (Matuszak, 2021). Moreover, as mentioned above, the competitiveness of Ukrainian agriculture depends on the richness of its soils; however, the technical approaches adopted by agricultural enterprises are severely impoverishing these soils. In addition

BOX 3. CHANGES IN UKRAINIAN CROP PRODUCTION

The area allocated to cereals in Ukraine has remained fairly stable between 2000 and 2021, fluctuating between 14 and 15 million hectares. However, this stability conceals a change in the structure of the cereals grown: the area allocated to maize has more than quadrupled, rising from 1.3 million to 5.5 million hectares (equivalent to more than a third of the EU's maize area). This increase has come at the expense of barley and other more marginal cereals such as oats, rye and millet (SSSU, 2022). Moreover, while acreage has remained stable, cereal production volumes have almost doubled in 20 years due to improved yields. These figures could continue to rise over the next few years. For example, maize yields have risen from 3 tonnes per hectare (t/ha) in 2000 to 7.7 t/ha in 2021, and could reach 9.3 t/ha in 2033 (Bogonos *et al.*, 2023), which is equivalent to the average yield seen in France from 2017-2021 (Agreste, 2022). The same trend can be observed for other crops.

Over the next few years, however, the area allocated to cereals could decline in favour of oilseeds, the cultivated area of which has been rising steadily since the early 2000s, from 3 million hectares to 8.7 million hectares in 2021 (Bogonos *et al.*, 2023). Among oilseeds, sunflower cultivation is the most significant, covering 6.4 million hectares (almost 2 million hectares greater than the area of sunflowers cultivated in the EU), and which is likely to increase further in Ukraine due to its high profitability and the existence of well-established infrastructure and value chains. At the same time, soya and, to an even greater extent, rapeseed crops are also expanding (Bogonos *et al.*, 2023).

to the shortening of rotations and the decoupling of livestock and crops, the development of sunflower cultivation (Box 3) is contributing to exacerbate soil erosion: 40% of Ukrainian land is already suffering from erosion, and around 40% is at risk of erosion (Levasseur, 2022).

Despite these negative impacts, Ukraine remains a highly competitive agricultural power, including on the European market, due to its favourable soil and climate conditions, the high concentration of export-oriented farms, and low production costs.

4. THE EUROPEAN TURNING POINT FOR UKRAINIAN AGRICULTURAL EXPORTS: A TREND THAT BEGAN IN 2014

4.1. The EU-Ukraine Association Agreement is central to the liberalization of agricultural trade

In 2013, Ukraine exported to three blocs: post-Soviet states, Russia being the main recipient (35%); the EU (26%); and the rest of the world (39%), mainly Middle Eastern countries, China and India (Matuszak, 2018). In terms of value, the agricultural sector represented 27% of exported goods, behind metallurgy (28%). Russian aggression against Ukraine in 2014 represented a turning point in terms of both the structure of its exports and the destination countries.

The share of agricultural and food products in exports rose by almost 20 percentage points to 44% in 2019, overtaking metallurgical production, which then accounted for just 20% of the value of exported goods. This increase was also reflected in value: agri-food exports rose from $16.9 billion in 2013 to $22.1 billion in 2019 (while the total value of exports fell from $62.3 billion to $50.1 billion during the same period) (Matuszak, 2021). Exports to post-Soviet states fell drastically in favour of the EU, the Middle East and South-East Asia. Then in 2016 the EU became Ukraine's main trading partner.

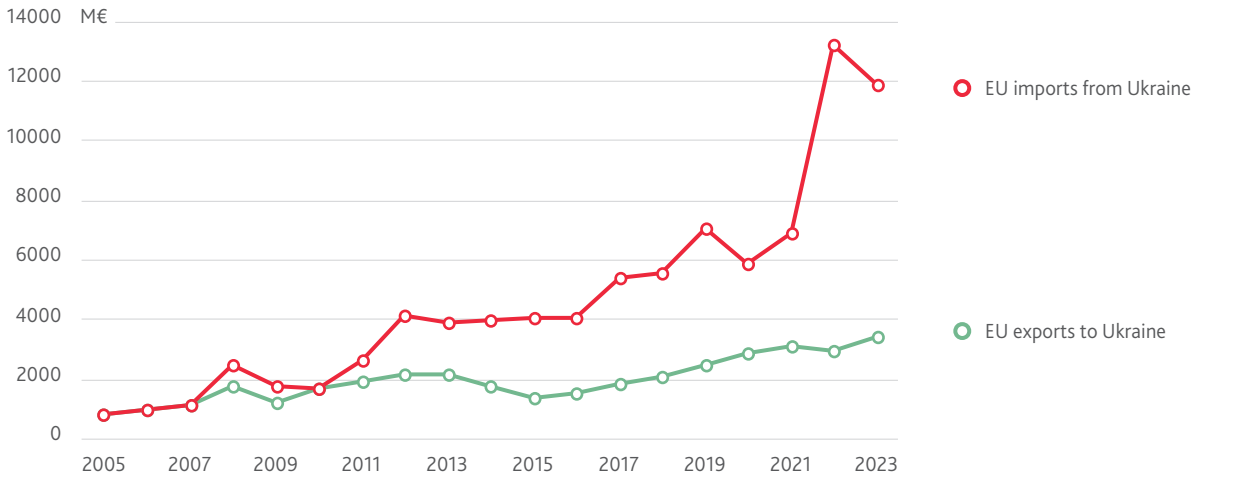
The increased trade between Ukraine and the EU is mainly due to the agri-food sector. The trend can be explained by the 2016 Russian-imposed embargo on Ukrainian agricultural products, the strong competitiveness of these products within Europe–other Ukrainian goods being less competitive on the common market–and the adoption of the Association Agreement between the two territories. The agreement, which was ratified in 2014 and came into force in 2017, lowers and abolishes customs duties on a range of goods and defines tariff quotas for products regarded as more sensitive (wheat and poultry, for example). It also provides for the gradual alignment of Ukraine's agri-food system with current EU veterinary, sanitary and phytosanitary standards.

4.2. Trade structured on the dependence of some EU countries on feed imports

Ukrainian exports to the EU increase by 80.3% between 2015 and 2019 (Figure 2). The country went from being the eighth largest supplier of agricultural and food products to the EU in 2015 to the fourth in 2021: Ukraine provided 7% of European agri-food imports (and up to 16% of oilseed imports and 36% for cereals, both mainly for feed) (DG Agri, 2022). In 2021, the EU's main imports from Ukraine were oilseeds (54% by value) and cereals (25%) (DG Agri, 2024a). Eggs and chicken accounted for only 2% of European imports from Ukraine.

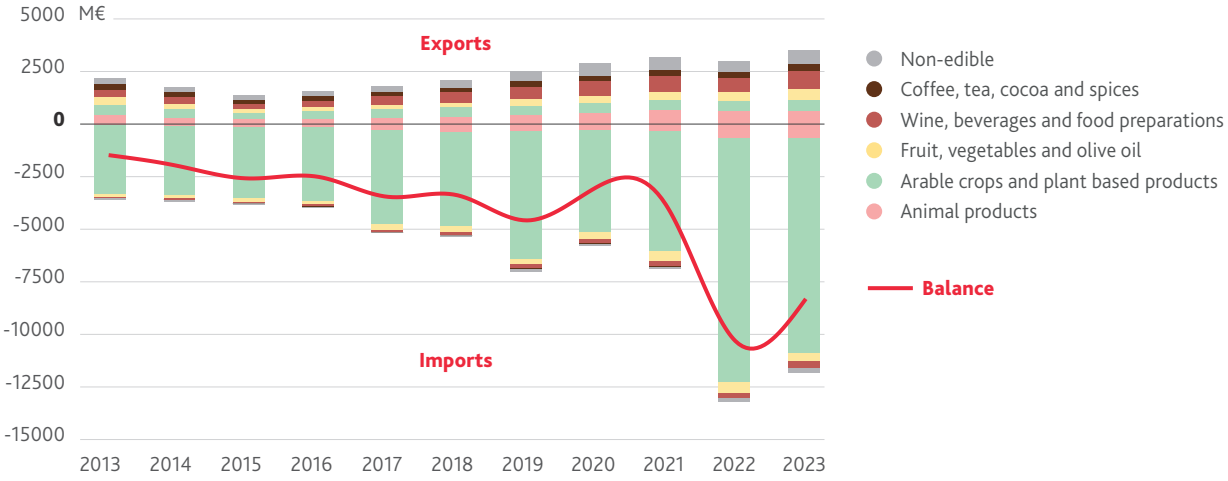
These figures conceal major disparities between countries: imports from Ukraine to the Netherlands increased by 182% between 2015 and 2019, making it, before 2022, the main

FIGURE 2. Trade in agricultural and food products between Ukraine and the EU



Source: data provided by the European Commission.
https://agriculture.ec.europa.eu/international/agricultural-trade/trade-and-international-policy-analysis/monitoring-eu-agri-food-trade-previous-editions_en

FIGURE 3. Structure du commerce agroalimentaire de l'UE avec l'Ukraine, 2013-2023



Source: https://agriculture.ec.europa.eu/system/files/2023-05/agrifood-ukraine_en_0.pdf

importer of Ukrainian products in Europe, ahead of Spain and Italy (Matuszak, 2021). These three countries account for 50% of Ukrainian imports to the continent, and they are also the countries with livestock farms that are the most dependent on the purchase of feed: while a feed self-sufficiency rate of 36% is the average for EU livestock farms, this figure is only 10% for these three countries.

European exports of agricultural and food goods to Ukraine have also increased (Figure 2). Exports consist mainly of dairy products, fruit and vegetables, coffee and seeds (Figure 3). Ukraine's main suppliers are Poland, Germany, the Netherlands and France. Ukraine receives 2% of the EU's agricultural and food exports (European Commission, 2024a).

4.3. European agriculture faces a paradox regarding Ukraine, highlighted by the war since 2022

While trade between the EU and Ukraine has gradually increased since the mid-2000s, growing particularly strongly since the mid-2010s, the year 2022 marked a change of scale in the quantity of imports from Ukraine (Figure 2).

The Russian invasion of Ukraine initially caused great concern in Europe and worldwide due to the risk of shortages of certain foodstuffs–Ukraine and Russia being two major agricultural powers. From March 2022, the Commission authorized derogations from the CAP's environmental obligations concerning set-aside so as to increase the production potential of European agriculture. At the same time, in June 2022, the EU temporarily suspended customs duties and tariff quotas on products from Ukraine to support the country's war effort (a measure that had been introduced previously in 2014 and 2015) and established solidarity corridors to increase Ukrainian exports across European territory following Russia's blockade of Black Sea ports, through which 90% of Ukrainian agricultural exports had passed prior to the war (Konończuk *et al*., 2023).

In response to demonstrations involving large numbers of farmers in Europe, particularly in Poland and France, safeguarding clauses were added in May 2024: if the volume of imports exceeds that observed between 1 July 2021 and 31 December 2023, customs duties may be re-imposed on certain Ukrainian products, such as poultry, eggs, sugar and maize. Votes on new derogations relating to the CAP's environmental cross-compliance were also planned for 2023 and 2024, due to the influx of Ukrainian agricultural products into the common market. The reduction of environmental requirements was intended to boost the competitiveness of European products in the face of Ukrainian produce.

The development of measures and justifications adopted by the Commission following the Russian invasion of Ukraine underlines the paradox in which European agriculture finds itself: on the one hand, the continent is dependent on cereal and oilseed imports from Ukraine for feed; on the other, European farms are structurally less competitive for certain agricultural commodities and can therefore feel threatened by Ukrainian competition. Indeed, European farm sizes are not on the same scale as Ukrainian mega-structures, which also benefit from numerous advantages that cannot be replicated in Europe (fertile soils, low cost of labour and land).

This contradiction makes accession negotiations between Ukraine and the European Union all the more delicate.

5. THE PROSPECT OF UKRAINE'S ACCESSION TO THE EU: CHALLENGES FOR THEIR RESPECTIVE AGRICULTURAL SECTORS

On 28 February 2022, four days after the Russian attack on Ukrainian territory, Kyiv formally submitted its application to join the European Union. It was granted candidate status in June 2022, and in December of the same year the European Council approved the opening of negotiations between the European Commission and Ukraine. Negotiations formally began on 25 June 2024, at the first Intergovernmental Conference on Ukraine's accession.

These decisions confirm and strengthen the trade and budgetary relations between Ukraine and the EU, raising a series of challenges and opportunities for European (5.2) and Ukrainian (5.3) agricultural sectors, as well as for the European Union's internal political dynamics (5.1).

5.1. Political and budgetary consequences for the EU

5.1.1. European political dynamics in the event of enlargement: restoring the Ukrainian agricultural sector is a central issue

First and foremost, Ukraine's possible accession to the EU raises political questions. Ukraine could become the fifth most populous country in the EU.[4] This statistic is essential when it comes to voting in the Council, allocating seats in the European Parliament and appointing Commissioners. Given the importance of the agricultural sector for Ukraine, in terms of both the country's economy and in the collective imagination, it is likely to occupy a central place on Kyiv's political agenda.

In addition to Ukrainian participation in European institutions, the EU's political balance could also be affected by the internal reforms underway to prepare for enlargement. Several countries, including France and Germany, consider that the EU must be reformed prior to its enlargement to include new countries. For example, they propose the extension of qualified majority voting to issues of foreign policy and taxation within the Council. Both Ukraine's accession and the reform of the EU's operating rules would change negotiation dynamics, the balance of power and ultimately the policies adopted (Blockmans, 2023). At this stage it is impossible to ascertain what the consequences of this new balance might be for the European agricultural sector.

Kyiv's position will depend on the structure of the agricultural sector at a given point in time, since agriculture is being particularly affected by ongoing Russian attacks; it is possible that the Ukrainian authorities will make decisions regarding reconstruction that will modify the country's agricultural structure that is described in this *Study*. The EU could also play a central role in determining the pathway to follow, since the sector's reconstruction will be implemented in conjunction with the accession process. Although the country's main reconstruction proposals stress the importance of taking the EU's climate and environmental standards into account, they do not specify which model to use (Flamm & Kroll, 2024). As we have seen, Ukrainian agriculture is diverse. The different agricultural structures do not have the same social and economic functions, and nor do they have the same environmental impact. Whichever model the Ukrainian authorities adopt for the rebuilding of its agricultural sector, it will be a structural factor in the positions supported by Kyiv during European negotiations. Indeed, the measures supported by the Ukrainian authorities during voting in the Council or Parliament will not be the same depending on whether Ukrainian agriculture has continued to intensify and expand or, conversely, whether the government has chosen to revalorize medium-sized family farms.

5.1.2. Support for Ukraine: one of the many pressures on the CAP budget

In addition to the consequences for the political dynamics within the EU in the event of Ukraine's accession, the enlargement process already underway is likely to have an impact on the distribution of the European budget, particularly the agricultural budget.

European agriculture is mainly supported and regulated by the CAP, which accounts for a third of the European budget, or around €50 billion each year. Funds are mainly allocated in the form of direct aid to farmers,[5] representing on average 63% of their current income before tax.

The scale and distribution of CAP aid among Member States is determined every seven years, during MFF negotiations. By 1 July 2025 at the latest, the European Commission will publish a proposal for the new 2028-2034 MFF, which will then be discussed by the Council and the European Council, a process that can take up to two years. The timeframe for Ukraine's eventual accession remains uncertain: some experts believe that a rapid accession before 2035 is possible, while others envisage the process extending beyond 2040 (Damen, 2023). Regardless of the date when Ukraine joins the EU, the official recognition of the country as a membership candidate has budgetary implications.

Indeed, the MFF provides the Instrument for Pre-accession Assistance (IPA), with a budget of €14 billion for the 2021-2027 period, to support candidate and potential candidate countries

[4] There are uncertainties regarding the size of the Ukrainian population and territory at the end of the war.

[5] This aid comes from the CAP's first pillar, which is financed entirely by the European budget via the European Agricultural Guarantee Fund (EAGF). It accounts for 65% of CAP aid in Europe and 73% in France. The second pillar, co-financed by the European Agricultural Fund for Rural Development (EAFRD) and national budgets, covers territorial and environmental measures. The CAP also includes the Common Market Organisation (CMO), which accounted for 7% of the EAGF budget in 2022 (Régnier *et al*., 2024).

seeking EU membership[6] in their implementation of the reforms necessary to join the Union.[7] Ukraine, which was not a candidate country when the 2021-2027 MFF was adopted, is not a recipient of this aid. It benefits from an ad hoc instrument, known as the "Ukraine Facility", that was adopted during the mid-term review of the MFF at the end of February 2024. The Ukraine Facility allows the EU to provide Ukraine with support of €50 billion (of which €33 billion is for loans and €17 billion for grants). The purpose of this instrument is to support the Ukrainian State, to assist it in its reconstruction efforts and to accelerate the reforms to be carried out with a view to EU membership, including in the agricultural sector (section 5.3). The sums committed for Ukraine (€50 billion over three years)–compared with the IPA's €14 billion which covers eight countries over seven years–suggest that the next MFF will provide increased support for Ukraine.

Beyond the aid granted to Ukraine, the future European budget has many objectives: repayment of the recovery plan from 2028 (which should represent between €14 and €15 billion each year, or around 7% of the European budget [Begg, 2023]), and increased spending on defence and industry–to name only the most significant additional expenditures. However, revenues of the future MFF should be relatively stable: no new own resources have been adopted to date,[8] and most Member States are reluctant to increase their national contributions to the European budget. In addition, calls for a new common borrowing have also been strongly rejected by some Member States.

Given these pressures, the CAP budget appears threatened: since 1988, its share of the European budget has steadily decreased, and nothing in the strategic agenda for 2024-2029 adopted by the European Council indicates that agriculture will be a priority, either politically or budgetarily.

These various pressures could lead political and agricultural leaders to support CAP reform, either to justify maintaining its budget, or to increase its effectiveness in the context of a budget reduction.

5.1.3. Ukraine's accession: a likely trigger for extensive CAP reform

The possible accession of Ukraine to the EU could reinforce the need for reform in the functioning of the CAP, over and above its budget. Indeed, the Commission has indicated that the next MFF will have to take enlargement into account, particularly in the design of the various spending programmes, which include the CAP (European Commission, 2024b). It is unlikely that enlargement will occur without substantial reform of this policy. In the event of accession with an unchanged framework, Ukraine could receive between €10 and €12 billion in CAP funding each year (Emerson, 2023; Darvas *et al*., 2024). This would make Ukraine the largest beneficiary of this policy, ahead of France, which currently receives €9.5 billion a year.

The size of Ukraine's potential CAP allocation is linked to its UAA. This is currently the main basis for distributing funds under the CAP's first pillar: the more agricultural land a country has, the more money it receives from the EAGF (which finances support under the first pillar). Therefore, one possible approach to minimize the budgetary impact of enlargement to include Ukraine could be to reform the EAGF allocation criteria, which would enable a rethinking of the system for the allocation of CAP direct aid. If new EAGF allocation criteria were to be defined, such CAP reform would represent a major opportunity to fundamentally reassess the way in which this policy is used to meet environmental and social objectives, in addition to economic objectives for the agricultural sector (Régnier *et al*., 2024).

Another possible approach would be to allocate a CAP budget to Ukraine that is uncoupled from its UAA, without reforming the EAGF allocation criteria for all Member States. Uncoupling the subsidies received by Ukraine from its UAA would undoubtedly mean that Kyiv would be able to redistribute aid among its beneficiaries according to more flexible criteria than those currently in force within the common framework of the CAP. Such action would mean a further increase in the subsidiarity granted to Member States in the application of a policy that is intended to be common. However, for several reforms now, various stakeholders and authors have questioned the limits of a CAP "renationalization" process (Bazin & Kroll, 2017). Indeed, as long as competition within the common market continues to exist between Member States in terms of their agricultural production, it is not in their interest to voluntarily generate competitive disadvantages for their own agricultural sectors. In other words, increasing the flexibility of the common framework effectively results in minimizing the CAP's environmental ambition (Guyomard *et al*., 2023). Thus, in such a scenario, the desire to avoid destabilizing major CAP mechanisms as they exist today could in fact destabilize the intra-Community competition framework.

Whichever option is chosen depends on the accession negotiations between Ukraine and the European Commission, and also on the negotiations on the next MFF and the post-2027 CAP–all three of these processes starting, formally or informally, this year.

5.2. Challenges and opportunities for the European agricultural sector

Irrespective of possible reforms to the political framework, enlargement to include Ukraine raises a number of challenges for European agriculture. Ukraine's integration into the common market is a source of concern for certain sectors, given the risk of increased Community-level competition. Some researchers view this competitive shock as positive, believing that it could lead to

[6] The IPA supports the following countries: Albania, Bosnia-Herzegovina, Iceland, Kosovo, Montenegro, Northern Macedonia, Serbia and Turkey.

[7] Regulation (EU) no. 2021/1559 of 15 September 2021 (EU Official Journal of 20 September 2021).

[8] The Commission has proposed the introduction of new own resources in 2021 and 2023, but these have not been adopted by the Council at the time of writing. For more information, see: Begg, I. (2023). The EU's Increasingly Complex Finances: A Ticking Bomb? *CESifo - EconPol Forum, 24*(4), 16-20; Schwarcz, A. (2024). *Union Revenues* [Fact sheets on the European Union]. European Parliament.

CAP reform that would boost the productivity and competitiveness of European farms (Balmann, 2023).

However, a race for competitiveness essentially based on the drive to increase production volumes seems particularly difficult for European farms, especially western Member States: Ukraine still has considerable scope for improvement (Bogonos *et al*., 2023; Shils *et al*., 2018), but the EU's capacity in this regard is much more limited. Western European yields have plateaued over the past twenty years as a result of climatic shocks, the decline of pollinators, and soil degradation, with maximum physical productivity rates having practically been reached (Schils *et al*., 2018). Moreover, competition between European and Ukrainian agriculture based solely on price competitiveness seems a risky strategy for the former, and other ways of enabling European production to stand out from Ukrainian production (non-price competitiveness) must be considered.

In addition, this competition is not exclusive to a scenario in which Ukraine joins the EU. In fact, the situation is already likely to be exacerbated by the fact that Ukraine and the EU have been linked by an association agreement since 2014, which includes a strengthening of trade relations between the two zones (section 4). Consequently, Ukraine's accession to the common market would not so much represent a break with the past, but more of an acceleration of the dynamics already underway–which include, in addition to increasing trade, bringing Ukrainian agricultural production up to European standards.

While such dynamics will inevitably put pressure on the European agricultural sector, they will also bring a host of opportunities. Firstly, the adoption of European standards by a major agricultural power such as Ukraine would reinforce Europe's status as a normative power on the international stage. Secondly, the integration of Ukrainian agriculture into EU food production could, to a certain extent, increase the EU's protein self-sufficiency. European farmers are heavily dependent on imported plant protein for feed, particularly soya from Argentina, Brazil and the United States (Albaladejo Román, 2023). Ukraine is a major soya producer: it produced 4 million tonnes in 2023 and could increase this by more than 1.5 million tonnes by 2030 (Bogonos *et al*., 2024)–in comparison, European production stands at 3 million tonnes (DG Agri, 2024c). These figures must be viewed in context, however, with the 30 million tonnes of soya (beans and oilcake) that the EU imports annually for feed (Levasseur, 2023). Therefore, while enlargement to include Ukraine will improve the EU's protein self-sufficiency, it will not call into question the need to rebalance European diets towards less animal products (Poux & Aubert, 2018).

In short, the challenges raised by Ukraine's accession–both in budgetary terms and for European agricultural sectors–are already present due to CAP budgetary pressures and the free trade agreement between Ukraine and the EU. The prospect of Ukraine's accession to the EU will only strengthen and accelerate these dynamics–which are being accompanied by the gradual harmonization of Ukrainian production standards with those in force within the EU. However, fully integrating Ukrainian agriculture into the common market could deliver a shock of such proportions that a major reform of the EU's vision for its food system, and consequently the CAP, would become essential.

5.3. Challenges and opportunities for the Ukrainian agricultural sector

Ukraine's possible accession to the EU also has a number of consequences for the Ukrainian agricultural sector. It would represent a definite opportunity for some farms–access to the common market and to CAP subsidies–but it would also entail major reforms.

To become an EU member, a candidate country must adopt all European legislation, known as the *acquis communautaire*. During accession negotiations, this legislation is divided into 35 chapters. Three of these relate more specifically to the agricultural sector: Chapter 11 ("Agriculture and Rural Development"), Chapter 12 ("Food Safety, Veterinary and Phytosanitary Policy") and, to a lesser extent, Chapter 27 ("Environment and Climate Change").

Chapter 11 covers three aspects:

(i) The ability to incorporate the *acquis communautaire* into agricultural issues: this mainly concerns the marketing standards for agricultural products (product shape, labelling rules, geographical indicators, labels, etc.) and the regulation of State aid.

(ii) The sector's ability to cope with accession, i.e. to deal with intra-Community competition. While agricultural enterprises are proving highly competitive, small family farms may find it harder to compete with European agricultural products.

(iii) The administrative capacity to implement the CAP. The CAP is a co-managed policy: funding comes from the pooled European budget, which is then administered by Member States. They are responsible for identifying which farms are eligible for CAP aid, allocating funds, and monitoring the farms.

At present, Kyiv does not subsidize its agricultural sector to a great extent. Between 2019 and 2021, the agricultural sector received around €600 million of public money[9] a sum that could rise to over €10 billion in the event of accession, which represents a huge administrative challenge (Nivievskyi, 2024). In the report published in November 2023 by the EU Enlargement Commission on the policy, it states that Ukraine is at an "early stage"[10] of preparation for the "Agriculture and Rural Development" chapter (European Commission, 2023).

The country is at a more advanced stage ("moderately prepared") with regard to Chapter 12, on sanitary, phytosanitary and veterinary policies. Indeed, the process of bringing Ukrainian agriculture up to European production standards began in 2014, when the Association Agreement was adopted. However, many changes are still needed before Ukrainian agriculture is fully aligned with European standards, which means substantial investment for farms. If the difficulties in accessing credit for small and medium-sized farms continue, there is a risk that the

[9] This sum does not include the tax exemptions that some farms benefit from.

[10] The European Commission's reports use the following typology to assess the state of preparation of the candidate countries for enlargement in the various sectors: "early stage", "some level of preparation", "moderately prepared", "good level of preparation" and "well advanced" (Stanicek *et al*., 2023).

latter, which are also threatened by the influx of European products, will withdraw from the market, accelerating the process of concentration and enlargement of Ukrainian farms that is already underway. This should not affect rural households, which operate outside of the market and is therefore unaffected by such standards; they are, however, excluded from the financial support that the CAP could provide.

Indeed, while the CAP represents an opportunity for Ukrainian farming, in the absence of reform it can also reinforce inequalities within the system. For example, without a limit on CAP support–which is optional under the current framework–some farms could receive up to €4.7 million annually (Emerson, 2023), while the smallest farms would receive no subsidies at all.[11]

In Chapter 27, concerning environmental issues, the Commission considers that Ukraine has achieved "some level of preparation". For agriculture, this chapter mainly concerns the prevention and control of water pollution via two directives: the Nitrate Directive and the Water Framework Directive.

Carried out in parallel and in conjunction with the projects mentioned in this section, the central issue over the next few years for the Ukrainian agricultural sector will be its reconstruction. The Russian-led war has destroyed and damaged much of Ukraine's agricultural land, as well as the infrastructure and equipment necessary for production (Box 1). The cost of rebuilding the sector could amount to $56 billion over ten years (Neyter *et al*., 2024). These costs include the purchase of agricultural machinery, storage silos, seeds and all the infrastructure needed to produce, process and distribute agricultural products, as well as various investments designed to modernize Ukrainian agriculture. Substantial resources will also be needed to demine Ukrainian land–landmines have been laid over more than 11 million hectares of farmland–and to rebuild irrigation infrastructure in the south of the country, which are particularly hit by droughts (Nivievskyi & Neyter, 2024).

Ukraine's post-war agricultural structure, and therefore the decisions taken by the Ukrainian authorities during the reconstruction process, will be crucial for the future of European agriculture, particularly in the event of enlargement to include Ukraine. Such decisions will define both the structure and nature of trade between the two areas, and above all Kyiv's position within the European institutions in terms of agricultural policy.

[11] This situation is not unique to Ukraine. In Romania, for example, whose agricultural structure shares many similarities with Ukrainian agriculture, three quarters of farmers received no aid in 2010 and 0.4% of farms accounted for 40% of the CAP budget allocated to this country (Roger, 2017).

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The Ukrainian agricultural sector: presentation and challenges in the light of a possible enlargement of the European Union

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