

## Ukraine's agricultural sector: the war impact and recovery prospects

### Introduction

#### 1. Factors affecting Ukraine's agricultural sector

#### 2. Loss and damage to the agricultural sector

#### 3. Needs for recovery

B

The Russian Federation's invasion of Ukraine on 24 February 2022 caused heavy civilian casualties, damage to infrastructure and production assets, and resulted in severe human, social and economic losses.

In addition, since October 2022, Russia has caused significant damage to critical energy infrastructure using long-range weapons (missiles and drones).

#### 1. Factors affecting Ukraine's agricultural sector

The key war-related factors affecting the Ukrainian agricultural sector were the reduction in sown areas (by 20% compared to 2021), damage to production facilities, structures, and equipment, rising prices for fertiliser and diesel fuel, and the blockade of Black Sea ports. All these factors have significantly reduced the income of Ukrainian farmers and agricultural companies.

The interruption of logistics chains was also a significant factor. Before the war, 90% of Ukraine's agricultural exports went through the Black Sea ports. In March 2022, grain exports totalled just 0.3 million tonnes, down from 5.4 million tonnes two months earlier. The establishment of alternative routes helped to increase grain exports to 1.2 million tonnes in April and 2.7 million tonnes in June 2022. This situation has put pressure on domestic wheat and corn prices, which fell by 45% between January and June 2022, while global prices rose by about 15%.

The Black Sea Grain Initiative has significantly increased exports since July 2022 (up to 6-7 million tonnes per month), but logistics costs have remained very high.

Mine contamination of land also contributed to the reduction in sown areas, even in the de-occupied territories. The total area of agricultural land contaminated by unexploded ordnance, mines, and fragments exceeds 400,000 hectares.

Related article: Establishing damage to land in Ukraine

Animal husbandry companies face challenges related to the production and sale of their products. The main difficulties include access to markets and buyers, access to necessary supplies (e.g. feed, vaccines, medicines, equipment) and labour, as well as high fuel and electricity prices or even lack of access to electricity.

The war is also changing the usual operational decisions of Ukrainian agricultural companies. Such changes include, first and foremost, limiting the use of agricultural inputs (e.g., fertilisers, pesticides, and seeds), diversifying business (e.g., exploring or starting new businesses) and changing markets (e.g., looking for new buyers).

It is also worth mentioning the indirect impact of the war on the agri-food added value chain. In particular, the number of suppliers of inputs has dropped significantly compared to the pre-war period, with the exception of feed and medical service suppliers, which have been relatively less affected. This reduction is down not only to problems with the delivery of the necessary inputs, but also to the pricing policy of suppliers, especially in the case of fertilisers and feed.

The overall sales structure has remained largely unchanged, but has undergone some adjustments. For example, before the war, most Ukrainian farmers sold their produce to wholesalers (i.e., operators who usually sell large quantities to other businesses), traders, and processors. After the full-scale invasion, it became more profitable to sell farm products to processors. The key problem in this area was the disruption of buyers of the products, their inability to purchase pre-war volumes or offer acceptable prices to the producer. According to the World Bank, on average, 18% of all SMEs in Ukraine stopped supplying their products due to low purchase prices.

## 2. Loss and damage to the Ukrainian agricultural sector

Before the full-scale war, Ukraine's agriculture accounted for 10% of GDP, employed 14% of the workforce, and accounted for 41% of total exports. The war began just before the start of the spring 2022 sowing campaign, which hit the agricultural sector hard.

Related publication: Doing agricultural business in Ukraine

As of 24 February 2023, losses and damages to Ukraine's agricultural sector were estimated at USD 40.2 billion. At the same time, the

amount of losses was USD 8.72 billion, while the total damages amounted to USD 31.50 billion.

Losses include partial or complete destruction of machinery and equipment, storage facilities, livestock, fisheries and aquaculture, perennial crops, as well as stolen inputs and products. Damage to machinery and equipment was the largest source of total losses, followed by stolen production means and damaged storage facilities.

The war-related losses mainly include lost income for Ukrainian farmers and agricultural companies due to lower production (e.g., unharvested crops), lower purchase prices (due to disrupted export logistics), and higher additional production costs (e.g., fertiliser and fuel, the cost of reclaiming contaminated land after surveying, demining, and releasing it).

### 3. Recovery needs

The total estimated reconstruction and recovery needs of Ukraine exceed USD 411 billion. The financing needs for agriculture account for at least 7% of this amount. At the same time, it should be understood that the war is ongoing and Russia will not stop destroying and looting Ukraine's production infrastructure. Nor will the hostilities and related restrictions stop, which will cause even more damage. It is clear that damages and losses will continue to accumulate before long-term reconstruction, rather than emergency repairs can begin.

Based on current estimates of damage and loss and the post-disaster needs assessment methodology, the KSE Agricultural Centre predicts that Ukrainian agriculture will need at least USD 23.5 billion for reconstruction and recovery. This estimate includes USD 7 billion for reconstruction and USD 16.5 billion for recovery.

The recovery and reconstruction needs of the Ukrainian agricultural sector can be divided into the following basic categories:

- reconstruction of agricultural production, which includes the replacement and repair of destroyed and damaged assets (e.g., replacement and repair of storage facilities, replanting of perennial crops, replenishment of livestock herds, etc);
- restoration of agricultural production, which also includes providing Ukrainian agricultural producers with resources, public services and preferences that will allow them to resume production;
- modernisation of agricultural production, which should not only aim at returning it to its pre-war state, but also at improving production processes, introducing new technologies and new standards to increase production efficiency and product compatibility with global markets;
- rebuilding the export infrastructure, taking into account the lessons of the war. This recovery should include not only rebuilding damaged infrastructure, but also creating a diversified logistics system that is resilient to external influences. For example, it is necessary to understand the role to be played by land routes for agricultural exports from Ukraine. Given the prospect of Ukraine's membership in the

- EU, investments in improving road and rail connections to the west, developing Danube river ports and technologies to overcome incompatible rail gauges are reasonable and necessary;
- demining and reclamation of agricultural land contaminated as a result of the military conflict, including the removal of unexploded ordnance, remnants of destroyed military equipment, craters, trenches and other fortifications;
  - facilitating access to finance. Private sector investment is needed not only for reconstruction but also for long-term development. This is especially necessary for small and medium-sized farms that lack a credit history, sufficient collateral, and transparent financial reporting. One of the necessary steps on this path is the possibility of pledging agricultural land or rights to use it (in Ukraine, most agricultural producers operate on leased land). It should be understood that during the recovery period, Ukrainian agriculture will compete for funding with other important sectors, such as electricity and other utilities, housing and communal services, healthcare, transport and the military. Under these circumstances, it is likely that the Ukrainian agricultural sector will have less money available than expected, and political will is needed to rectify this situation;
  - a balanced approach to supporting basic agricultural production and processing. For example, a current topic of discussion in the agricultural community is the call for increased value addition in Ukrainian agricultural production and exports. It is believed that instead of exporting raw materials (grains and oilseeds), it would be better to develop, for example, livestock production on this basis and export high value-added dairy and meat products. However, when Ukraine becomes a member of the EU, it will be subject to EU regulations on animal welfare, transport of live animals, slaughterhouse standards, food safety rules, etc. This will increase the production costs of Ukrainian agro-processors and may reduce or negate some of Ukraine's obvious comparative advantages;
  - taking into account reforms related to EU integration and the prospect of Ukraine's accession to the EU. It is likely that the EU will be the main source of donor funding for Ukraine's reconstruction and recovery, with which other global donors such as the World Bank and the EBRD will coordinate their assistance. It should be taken into account that in the EU, agriculture is subject to extensive EU-wide regulation of markets and standards in the areas of agricultural activities, food safety, environmental protection and animal welfare. It can therefore be assumed that a significant part of donor funding will be directed towards rebuilding the Ukrainian agricultural sector in line with these European standards;
  - development of regional administrative capacity in Ukraine to implement the Integrated Management and Control System. Such a system is necessary for the implementation and control of various forms of farm support (e.g., control over the observance of sufficient crop diversification, which is a condition for receiving per hectare support payments).

Overall, the prospect of EU accession is expected to facilitate reconstruction and recovery, creating more attractive conditions for foreign investment in Ukraine. However, it should be borne in mind that the reforms and commitments associated with this prospect will potentially limit the options for Ukraine's traditional agricultural policy in terms of its compatibility with EU accession.