Ukraine is an important producer of corn

In 2021/22 year, Ukraine is ranked 4th after the United States, Brazil, and Argentina among the world's largest exporters of corn. The share of Ukrainian corn in the global market is accounting for 16% (link).

The harvested area of corn in 2020/21 was 5.4 million hectares (ha), which is the highest figure in a decade (<u>link</u>). The sowing campaign, which usually starts in mid-April, has already started only in the areas, unaffected by conflict (<u>link</u>).

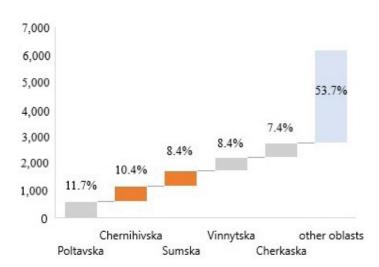
In 2021 farmers in Ukraine harvested a record 40 million tons of corn (<u>link</u>). However, the Ministry of Agrarian Policy predicts that at least 70% of agricultural land will be sown in total in Ukraine in 2022, 3.5 million ha less than last year (<u>link</u>).

Poltavska, Chernihivska, Sumska, Vinnytska, and Cherkaska oblasts became the leading regions in the production of corn, with the production of over 3 million tons on more than 400 ha of corn crop areas in each of these oblasts (Figure 1) (link). As of 21 April 2022, more than 50% of total cropland areas in two out of five of these oblasts, namely Sumska and Chernihisvka, had been affected by active hostilities.

In addition, Chernihivska oblast, had one of the highest yield capacities of 90.7 centner per ha in 2021, and also high yield capacity was recorded in Sumska oblast of 69.8 centner per ha (<u>link</u>).

Due to a risk of land contamination with explosive ordnance, reduction of the area under corn in these productive oblasts will affect the total yield (<u>link</u>).

Figure 1.Oblasts with the greatest corn crop areas in 2021 (left axis - thsd ha / % of total corn crop areas in Ukraine). Highlighted are conflict-affected oblasts.



16% - share of Ukrainian corn in the global market

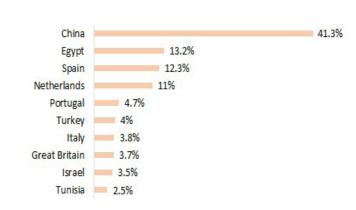
The role of corn production for the Ukrainian economy

Corn is an export-oriented crop in Ukraine, where around 83% of the corn harvest goes for export (link).

In 2021, Ukraine harvested 40.0 million tons of corn, of which only 18.0 million tons were exported before the conflict escalation on 24 February 2022. Ukraine's annual domestic demand for corn is 7.0 million tons (~17%), so about 17.0 million tons is an export surplus (link).

The main importers of Ukrainian corn are China, Egypt, Spain, Netherlands, Portugal (Figure 2) (<u>link</u>). Note, for both countries, China and Egypt, the share of Ukrainian corn import is accounting for 30% (<u>link</u>).

Figure 2. Top 10 importers of Ukrainian corn 2020-2021



Although Ukraine produces corn mainly for export, deep processing of corn is a powerful business resource which has great economic prospects for the country.

Currently, Ukraine has a corn processing industry focused on the production of corn-based cereals, corn starch, molasses, alcohol, and fodder.

Approximately half of the corn-based cereals produced in Ukraine are exported. According to the State Statistics Service, in 2021 Ukraine exported 11,790 tons of corn cereals (<u>link</u>). China and the EU are the largest importers of Ukrainian corn starch (about 40% in total) (<u>link</u>).

Impact of the conflict on corn production and international trade

As 17.4% of croplands are currently in conflict-affected areas, there are concerns that sowings may be interrupted by military actions, and that soil may be affected by pollutants emanating from explosive materials and land mines (link).

Since the conflict escalation on 24 February 2022, export through Ukrainian ports is blocked. Establishment of overland export routes across the western borders of Ukraine can provide a flow of up to 600,000 tons per month, which is only 10-15% of the seaports' export capacity (<u>link</u>).

83% of corn produced in Ukraine goes for export

Ukraine was already able to export 1.1 million tons of corn in March 2022 (link). In the same month world corn prices rose by 19.1% compared to March 2021, reaching a record high (link).

At the same time, Ukraine imports about 30-40% of corn seeds for sowing. Although this year, the corn seeds supply was interrupted since the conflict escalation on 24 February 2022, and the sowing campaign will be implemented with available seed stocks (<u>link</u>).

In response to the request of the Ministry of Agrarian Policy and Food of Ukraine, international company Bayer donated more than 26,000 bags of corn seeds to support Ukrainian farmers. More than 1,250 small farms in 17 regions of Ukraine will receive high-quality corn seeds and will be able to sow an additional 30,000 ha of corn fields (link).

When grown, corn plants develop a large amount of biomass, so it has an increased need for nutrients, especially nitrogen, compared to other cereals (<u>link</u>). Due to rising fertilizer prices and disruption of logistics links, the lack of fertilizers will affect corn yields.

Corn requires more investment per ha, more drying costs in autumn and more storage and transportation capacity for export, which is currently limited by rail, road and river transport capacity. Therefore, many farmers have replaced the part of the corn sown areas in favor of sunflower, soybeans, buckwheat and other cereals. Corn crop area forecast to be reduced by - 31% (link).

Opportunities

- On 24 March 2022, Ukraine adopted a Resolution on removing corn from the list of goods subject to licensing, which is expected to facilitate an increase in production and export due to ease of access to the market (link).
- On 27 April The European Commission proposed to suspend, for one year, import duties on all Ukrainian exports to the European Union (<u>link</u>).
- Entrepreneurs' access to credit is one of the preconditions for economic recovery after the shock. The Ministry of Economy of Ukraine and banks have approved a loan program, providing an opportunity to obtain a loan of up to UAH 60 million to any Ukrainian company at 0% interest rate. Since the beginning of the escalation, loans from state-owned banks have been issued for a total of UAH 1.1 billion, with 42% of the loans coming from the agricultural sector (link).
- Ukraine and Poland have agreed to set up a joint logistics company to increase rail transport of Ukrainian exports to the EU and world markets via Europe (<u>link</u>).
- The governments of Ukraine and Lithuania are discussing the possibility of using Lithuania's logistics capabilities to export Ukrainian grain to traditional markets for Ukrainian agricultural products in Africa, Asia and the Middle East (<u>link</u>).
- The ports of the Baltic States are the most promising for the export of Ukrainian grain due to the blockade of Ukrainian ports. Export cargo to these ports can be delivered by rail (link).
- Austria has recently lifted restrictions on Ukrainian carriers - now freight traffic through Austria is possible without any permits, which, together with previously lifted restrictions by Slovakia and Italy, allows unimpeded supply of Ukrainian agricultural products to Italy and its seaports (<u>link</u>).
- In order to successfully sow, farmers were provided with Starlink satellite internet in the areas where communication systems were interrupted (<u>link</u>).

To ease international trade, corn was removed from the list of goods subject to licensing

Agrarian sector in proximity to conflict - 22 Feb. to 29 Apr. 2022: corn production risk

