

### Ukraine is one of the top three producers of fruits and vegetables in Eastern Europe

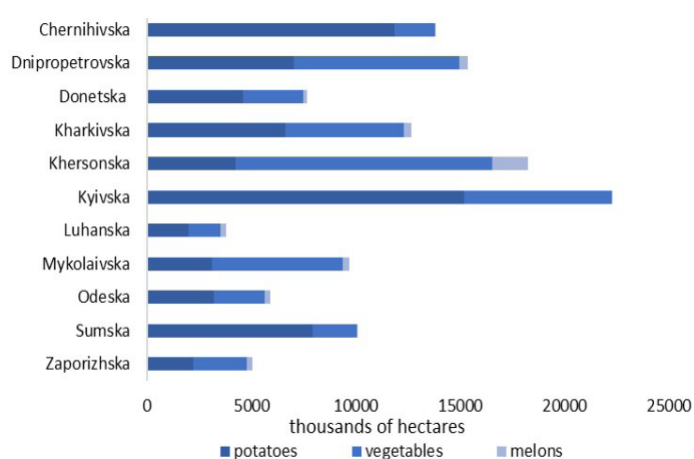
In the 2020-2021 market year, vegetables accounted for 72.5% of Ukrainian agricultural exports to Europe. Ukrainian vegetable exports make up 0.5% of the world market. Ukraine exports vegetables to 96 countries. Export of vegetables from Ukraine was carried out by 400 exporters in the world market ([link](#)). Due to the escalation of the conflict, logistics and trade infrastructure have been disrupted, which complicates the export of vegetables.

In 2020, Ukraine ranked 19th globally among top legume exporters, and was in the top 5 of exporters for tomatoes, onions, frozen, dried and boiled, fresh and chilled vegetables ([link](#)).

In 2021, the sowing area of vegetables was 1.7 million hectares. The gross harvest of vegetables was 231.7 million tons, with the following average yields: potatoes - 16.6 tons/hectare, open field vegetables - 20.8 tons/hectare, and melons - 8.1 tons/hectare ([link](#)).

In 2021, potatoes made up 38.5% of land cultivated with vegetables in Ukraine. The largest harvest areas for potatoes were in Vinnytska, Zhytomyrska and Lvivska oblasts (23% of total potato harvest zones). The oblasts with the largest harvest areas for open field vegetables were Lvivska, Khersonska, Dnipropetrovska, Kyivska and Kharkivska oblasts (40.6%). There was military action in all of these areas except the Lvivska oblast. Khersonska oblast hosted 37% of the overall national harvest area for melons (Figure 1) ([link](#)).

Figure 1. Vegetable crop areas (2021) in conflict-affected oblasts



On May 2022, the projected reduction of harvest areas for vegetables growing in conflict affected areas are: more than 90% - in the Khersonska and Luhanska oblasts, more than 70% - in the Zaporizhska and Chernihivska, 57% - in the Sumska, 42.6 - in the Kharkivska, 40% - in the Donetsk, 13.9% - in the Kyivska and Mykolaivska.

Potential gross harvest for 2022 is estimated to be 12.6% less than the previous year's harvest for potatoes, and 18.6% less for open field vegetables ([link](#)).

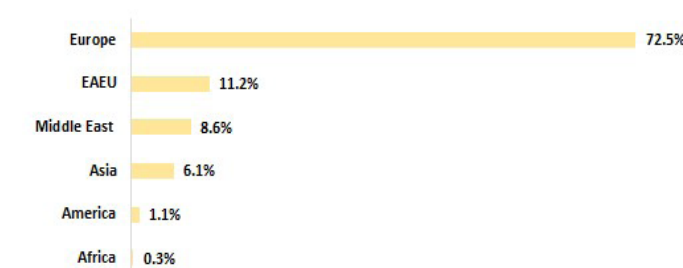
Smallholders constitute 85% of vegetable production in various subsectors across Ukraine. The conflict will likely severely disrupt the vegetable production of tens of thousands of smallholder farmers who decide to stay behind, due to lack of inputs, lack of access to land and concerns over safety ([link](#)).

### Importance of vegetables production for the Ukrainian economy

While Ukraine imported more vegetables than they exported in 2021, vegetable exports amounted to 498 thousand tons in the sum of 196.6 million USD. The majority of exported vegetables were dried legumes, representing 78% of total exports. Vegetable imports were 416 thousand tons amounting to more than 250 million USD in expenditure. Although potatoes are the primary type of vegetable grown in Ukraine, at 42% potatoes were also the most imported vegetable, followed by tomatoes (24%), which are an important input into the vegetable processing industry ([link](#)).

In the 2020-2021, European importers receive the vast majority (72.5%) of Ukrainian vegetables. The remainder go to the Eurasian Economic Union (EAEU) (11.2%), the Middle East (8.6%), Asia (6.1%), America (1.1%), Africa (0.3%) (Figure 2). The main exporters to Ukraine are: Poland (6.3%), the Netherlands (2%) and Germany (1.6%) ([link](#)).

Figure 2. Importers of Ukrainian vegetables 2020-2021



Between January and May of 2022, Ukraine exported 35 million USD worth of vegetables. During this time dried legumes accounted for 71.9% of this value. Imports amounted to 105.9 million USD ([link](#)).

### Impacts of the conflict on vegetables processing

On January 2022, the industrial production of vegetables had increased with 12% compared to 2021. Canned vegetables are the main output of the Ukrainian vegetable processing industry (63%) ([link](#)).

19% of farmers are fully provided with seeds, fertilizers and plant protection products

It is estimated that about 45% of the fields in the areas where the hostilities have taken place are mined ([link](#)). Currently, demining of fields is taking place in Kyivska, Sumska, Zaporizhska, Chernihivska and other ([link](#)).

Regional reports suggest farmers in the south have reduced their potato plot area by 73.6%, due to insufficient material resources and instability of irrigation, while in Kyivska oblast, only half of the planned potatoes will be planted due to field mining ([link](#)). Problems with the supply of seeds, equipment for greenhouses, hotbeds and the supply of ready-made vegetables are added to the reduction in sown areas. Logistics infrastructure, especially in areas temporarily occupied and with presence of active hostilities, is unstable or non-existent ([link](#)).

In the southern regions, water supply has significantly deteriorated due to the hostilities. Zaporizhska and Khersonska oblasts, which supplied early vegetables and greens to almost all regions of Ukraine, is unable to export its products after the occupation ([link](#)). In the event of continued hostilities and occupation of the south, a shortage of tomatoes, cauliflower, broccoli, chinese cabbage, eggplants, watermelons and melons can be expected.

A vegetable harvest loss of 16.3% is predicted for Ukraine in 2022

As 21.6% of croplands in general 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. In general, all agricultural industry is experiencing difficulties this growing season due to limited access and availability of critical agricultural inputs including fuel, seeds and fertilizers, as well as disruption of logistics, and infrastructure damage ([link](#)).

### Opportunities

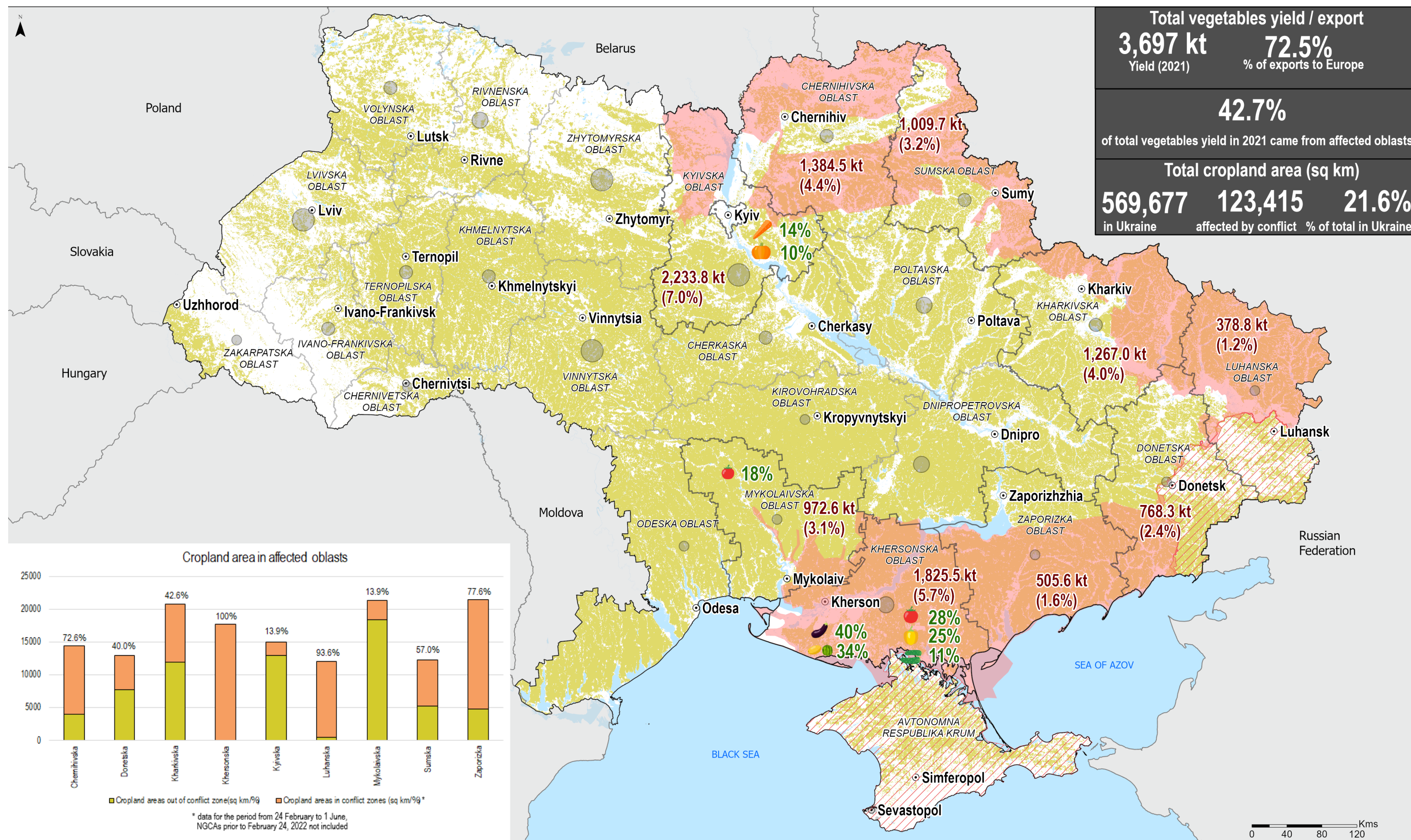
- Entrepreneurs' access to credit will enable the purchase of seeds, fertilizers and fuels and lubricants. The Ministry of Economy of Ukraine and banks have approved a loan program "Affordable Loans 5-7-9". As of 18 May, this program has issued a total of UAH 28.1 billion in loans to farmers to encourage sowing of the spring crop ([link](#)).
- Members of the European Parliament approved a one-year suspension of EU duties on all Ukrainian exports to support the Ukrainian economy ([link](#)).
- On 18 May, 18,000 families received potato seeds, and 15,000 families received vegetable seeds from the FAO ([link](#)). Farmers of the Lvivska oblast received 22 tons of highly productive seed potatoes from the Netherlands ([link](#)). As part of the USAID AGRO project, 400 tons of potatoes are being transferred to different regions in Ukraine ([link](#)).
- Canada will assist Ukraine in obtaining additional equipment for phytosanitary control, which will speed up the passage of all necessary examinations before the export of agricultural products ([link](#)).
- Organic Initiative has initiated the Grant Program "Support of the Organic Sector in Ukraine", which aims to preserve and strengthen the capacity of the organic sector of Ukraine in the medium and long term ([link](#)).
- The Ministry of Defense of Ukraine has allowed Ukrainian farmers to use drones to perform spring field work ([link](#)). While the Ukraine's airspace is closed, there is a shortage of diesel fuel and parts of the agricultural land remains mined, the use of drones to perform field work is relevant.
- In Ukraine, an electronic platform has been created to collect information on damages to the agricultural sector during the escalation of the conflict ([link](#)).



# UKRAINE

## Agrarian sector in proximity to conflict - 24 Feb. to 30 May 2022: Risk to vegetables production

For humanitarian purposes only  
Production date: 30 May 2022



■ Agriculture lands  
■ Water bodies  
■ Conflict Areas between 24 Feb - 1 June 2022

Fresh vegetable yields (kt), 2021

- <1000
- 1001 - 1500
- 1501 - 2000
- >2500

Share of 2021 national yield produced in conflict-affected oblast, by crop (%)

Only areas with a share more than 10% shown

■ carrot  
■ cucumbers and gherkins  
■ eggplants  
■ melons  
■ tomato  
■ edible pumpkins  
■ sweet pepper

1,825.5 kt (5.7%) Fresh vegetables yields produced by conflict-affected oblasts (kt)  
Percentage of total fresh vegetables production in Ukraine

Data sources: Administrative boundaries: OCHA  
Conflict areas: liveuamap.com  
Agricultural lands: Copernicus Proba-V (2019)