Resilience, autonomy, self-sufficiency Experience of Ukraine 2022-25.

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The full-scale Russian invasion, which has been ongoing since 2022, has covered 20% of Ukraine's territory and has significantly affected the agricultural sector. Territories where vegetables and such iconic products as onions and watermelons were grown have been and remain occupied. More than 90,000 km² have become mined or contaminated with explosive devices. The attacks destroyed hundreds of food infrastructure facilities: elevators, warehouses, vegetable storage facilities, and livestock complexes.

However, despite massive losses — over 10 million tons of lost grain elevator capacity, the destruction of logistics chains, and the blockade of seaports — Ukraine managed to avoid famine. This was made possible by the resilience of the agricultural sector, the activity of households, the adaptation of local communities, and state support.

Food production losses in the first months of the war

Russia's war against Ukraine has caused enormous losses not only in human casualties but also in the destruction of critically important food infrastructure.

- According to the Conflict Observatory (USA) analytical center, Ukraine's total losses amounted to about 10 million tons of grain elevator capacity.
- "Prometey" lost 18 elevators from its network.
- The State Food and Grain Corporation of Ukraine (SFGCU) lost 9 elevators.
- "Nibulon" lost at least 5 elevators and 3 river terminals (Kozatska, Holoprystanska, Kamyanka-Dniprovska).
- Other facilities: an elevator in Beryslav (5 warehouse buildings destroyed), elevators in Ochakiv, Gaichur, and Siversk completely destroyed by airstrikes or shelling.



These losses not only undermine export potential, but also affect local crop storage — especially in regions where farmers have lost the ability to transport their produce quickly.

In 2022, due to the loss of grain storage opportunities in elevators, small producers quickly adopted a new method for storing their harvest - special hand bags. Our foreign partners also helped them in this regard within the framework of international technical assistance (ITA) from the European Union and the United States.

Due to regular shelling by the Russians, the largest logistics warehouses of products were lost. In the Kyiv region, two largest warehouses were destroyed: a warehouse in the village of Kvitneve - 3,000 tons of chicken were lost; a warehouse in Brovary, where 50,000 tons of products were lost. In June 2024, a warehouse of the "Tavria V" chain in Odesa was destroyed, a warehouse of 24,000 m² with products.

Also, many farms, poultry farms, and livestock complexes were destroyed, resulting in the loss of livestock and future animal products.

 Chornobayivka Poultry Farm (Kherson Region) — over 4.5 million chickens died due to lack of food and access.



- Complex "Stepny" (Zaporizhzhya) 4,000 pigs and 1,000 calves were destroyed.
- Agroservice SG (Kharkiv region) in May 2025, attacked by drones, more than 100 cows died; losses exceeded 3 million euros.
- Novoraysk (Ukrlandfarming) all livestock and 470 pieces of equipment destroyed; total losses exceed 250 million US dollars.
- According to the Association of Milk Producers, the Kharkiv region lost half of its cow population: from 33 thousand to 17.5 thousand.

These strikes caused a shortage of dairy and meat products from large farms in the early months of the war. Restoring livestock production capacity takes years, and some regions still face difficulties in restoring production.

Along with the destruction of warehouses and grain elevators, Ukraine faced logistical constraints. The blockade of the Black Sea, strikes on the ports of Odessa and Chornomorsk, and the blockade of the ports of Kherson and Mykolaiv hit export potential and the availability of products in the frontline areas.

How Ukrainians reacted to risks of food restrictions

In the first weeks of the full-scale invasion, when basic products disappeared from store shelves in front-line regions, Ukrainians were not confused. In the spring of 2022, millions of Ukrainians planted a lot of potatoes and vegetables in their land plots to provide for themselves and their families. Farmers who lost access to the main fields (in the South, East) switched to small plots - their own, relatives', even school areas. This had an effect already in the autumn of 2022: a decrease in the price of potatoes, carrots, and beets after the peak in the spring.

Dozens of communities have adopted their own food self-sufficiency support programs. One of the most successful initiatives has been the "Victory Gardens" program, launched in 2022 by the "Civil Society Institute" and a number of donor organizations. Its main purpose is to support communities in growing vegetables on all available land. In 2022–2023, 66+ territorial communities from across the country joined the program: Dnipropetrovsk, Khmelnytskyi, Kyiv, Volyn, Ternopil regions. The following were used: communal lands transferred to communities through decentralization; school plots - for practical training of children and growing vegetables for school canteens; homestead farms, which received support - seeds, seedlings, fertilizers, equipment, consultations.

A vivid example is the Teofipol community (Khmelnytskyi region):

- Vegetables and berries are grown on school grounds and at a municipal enterprise.
- A chatbot was created for households to sell surplus products.
- Local schools and budget institutions are provided with home-grown products.
- In 2024, we sold products worth UAH 248,000 and donated UAH 80,000 free of charge to the Armed Forces of Ukraine and IDPs.



Also, since 2022, large-scale support programs have been launched in Ukraine, such as "e-Work", where more than 22,000 entrepreneurs have received grants by the end of 2024 - 239 of them for greenhouses/gardens, 808 for processing, 19,916 for their own business, and Grants of the Ministry of Agriculture and the Ministry of Economy, which include compensation of up to 70% of the cost of projects. For example, in 2024, 111 agricultural producers received UAH 477 million in support.

The flexibility of small farmers and households allowed for fairly quick and comprehensive solutions to food security issues for individual food products. In 2022, the Russians occupied the main Ukrainian territories where vegetables and such iconic products as onions and watermelons were grown. It was the Kherson region that was the main producer of these products.

The price dynamics for these products speak for themselves. The table shows the prices at the end of the harvest season for these crops.

<u>Food</u> <u>2021</u>		<u>2022</u>	<u>2023</u>	<u>2024</u>
Onion	10,61 2	~30,6 €	13,38 ₴	17,13 €

Watermelon	10-17 2	25-30 ₴	8-15 ₴	3-8 ₹
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The information space provides dozens of examples of how immigrants from the east and south began to grow vegetables and melons on a fairly large scale, which are not typical for the new territories.

The destroyed farms in Kherson, Donetsk, and Zaporizhia regions did not disappear - they moved. For example, the goat farm "Donetsk Kurkul" from Donetsk moved to Volyn and cheese production resumed. Farmer Vitaliy Kolysnychenko from Soledarska AH after moving, opened a craft production "Berestovski Syry" ("Berestovski Cheese"). Received the maximum grant of 500,000 UAH. and supplies milk to schools. Also, Olena Bryukhovetska, who moved from Donetsk to Myrnohrad, created a farm with pigs, turkeys, ducks and nutria and developed the production of semi-finished products and cheeses. Having opened the "Farmer's Shop" chain, Olena began selling local products and even runs social projects for the hospital.

These stories are about how refugees create new links of local production and sales, often using grants, digital services, and social media.

As a result of the intensification of local agricultural production and the relocation of small farmers to new regions and their active involvement in vegetable growing, prices for the so-called "borscht set" products have stabilized.

<u>Year</u>	Vegetables, UAH	Full set, UAH	Euro exchange rate
<u>2021</u>	50	150	30,59
2022	87,4	175	36,23
2023	28,7	185	38,54

<u>2024</u>	33,4	180	44,84
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This experience is valuable for Ukrainians and should be valuable for our EU neighbors, as war is already on Europe's doorstep.

Food markets and street trading

After the destruction of warehouses and logistics chains, retail quickly adapted. Food markets in Vinnytsia, Lviv, Kyiv provided preferential places for local producers. There are 6 markets in Vinnytsia, with 1,789 trading places, where more than 300 places are provided free of charge for trading agricultural products grown on their own land plots, namely at the markets: "Privokzalny-2", where 45 places are free; "Privokzalny-1", where 40 places are free; "Tsentralny", where 150 places are free; "Urozhay", where 50 places are free.



Also, in 2024, Kyiv organized more than 350 outdoor fairs, where vegetables and products from private farms were sold. Now, as many territorial communities prepare their own development strategies for the next planning period, many are including goals and measures aimed at local food security in their strategies. Importantly, products that are manufactured within or near the community not only provide better protection from supply disruptions during a crisis, but also reduce carbon emissions as their supply routes are shortened.

The largest food retail chains

During the war, large retail chains played an important role in ensuring the country's food security. Despite the threat of missile attacks and the destruction of logistics, the largest retail chains — ATB, Silpo, Varus, Metro, Novus, Fozzy, Auchan, Epicenter — continued to operate, providing the basic needs of millions of Ukrainians.

NΩ	Компанія	Мережі	Лого	Центральний офіс	Кількість торгових точок, 2023 р.	Кількість торгових точок, 2022 р.	Приріст 2023-2022 рр., %	Кількість відкритих магазинів у 2023 р.	Кількість областей покриття, грудень 2023 р
1	АТБ	ATE, ATE express		Дніпро	1207	1162	3,9%	19	22
2	Fozzy Group	Сільпо, Фора, Fozzy Cash&Carry, Le Silpo, Thrash!, Foodpod	Сільно	Київ	768	717	7,1%	53	22
3	мхп	М'ясомаркет	№ М'ЯС ® МАРКЕТ	Київ	269	225	19,6%	76	22
4	VolWest Retail	Наш Край, Наш Край експрес, SPAR	Haw Краû	Луцьк	259	249	4,0%	22	19
5	Аритейл	Коло	к⊚ло	Київ	238	221	7.7%	19	2
6	Клевер Сторс	Сім23, Сімі	©	Луцьк	234	167	40,1%	70	5
7	Львівхолод	Рукавичка, Під Боком	О рукавичка	Львів	209	200	4,5%	12	7
8	Оптторг-15	Делві	AE NBI	Київ	181	148	22,3%	40	6
9	Вересень плюс	Файно маркет, Файно express, Файно Дискаунтер, Соціальний магазин	файно маркет	Кропивницький	169	139	21,6%	30	3
10	Август- Плюс	МаркетОпт	Маркетопт	Кременчук	166	133	24,8%	33	7

ATB remains the leader in terms of the number of stores and turnover - over 1,200 points. While Silpo, Novus and Fozzy are actively developing the direction of craft and local products.

Silpo supermarkets have a program called "Shop of Traditions", which represents over 100 Ukrainian craft brands. Among them: "Berestovski Syry" - a relocated cheese factory from Donetsk region, which produces craft cheeses from goat and cow's milk; "Dobry Pastukh" — craft yogurts, kefirs and butter from Prykarpattia; "Kniazya Trubetskoy Family Winery" — local wines from Kherson region (moved to Vinnytsia region in 2022).

Metro has a separate stand "From a Ukrainian Manufacturer", where products from:

- "Green Pantry" herbal teas and seasonings from Cherkasy region,
- "Kraft canned food Zhytomyr" home-canned vegetables and meats,
- "Carpathian Jam" jam, marmalade and pastila.

Novus also has separate shelves with local produce, from fruits from Transcarpathia to smoked cheeses from Volyn. The chain said that by 2024, more than 17% of its fresh produce will come from Ukrainian small producers.

The appeal of large retailers to local food producers is a good sign. Such cooperation is important for the development of local producers, as it becomes their guaranteed market, and for retailers, who have a guaranteed level of supply during the crisis.

People's home front

Many communities and individual producers have come together and started to help the military and IDPs. There are many different examples here.

Zorivska community - 6 hectares of homestead land were planted, from which potatoes, beets, carrots, beans, peas, onions, zucchini, cucumbers, tomatoes, peppers were harvested, and 150 cans of zucchini caviar were rolled up and 11 buckets of cucumbers were pickled. Tomatoes were canned and tomato juice was made. Vegetables and home-canned vegetables are served to children in kindergartens, displaced persons, and our defenders. The community received an industrial autoclave from the "Victory Gardens" project. Now it produces stew and donates it to the Armed Forces of Ukraine.

"Honey House" - With the beginning of a full-scale war, the workshop began to prepare energy bars for Ukrainian defenders. One bar weighs 100 g and contains 300 kilocalories - this is enough to replace a full breakfast.

Volunteer communities working with households and small producers have set up production of dry soups, teas, stews, dried fruits and much more for the military at the front. Such supplies significantly supplement the nutrition of fighters in extreme conditions, when food supply on the front line is difficult. Thus, the national food rear of the Ukrainian defense forces was formed.

Trends for today

In 2024-2025, new methods of ensuring food availability, learned from wartime experience, slowly emerged in Ukraine. Territorial communities began to more often include food sustainability as a separate goal in their development strategies until 2030. That is, local authorities began to consider food as a critical component of local viability.

The largest food chains in Ukraine have begun to actively introduce special shelves for craft products. There is a sense of renewed confidence in local food as a high-quality and safe alternative to imports or large-scale production. At the same time, online trade and marketplaces are actively developing: CraftMarket.shop, Foody.ua, Hectare.ua. This creates space for small producers and farmers who previously did not have access to a wide market. Some communities are creating chatbots to sell surplus products to residents, which allows them to keep money within the community and strengthens short supply chains.

Thanks to simplified taxation and government programs to support households, thousands of people have started growing vegetables, fruits, and livestock not only for their own consumption, but also for sale at markets or online platforms. At the same time, schools, hospitals, and military units are increasingly purchasing food directly from local farmers and utilities. For example, in communities in Poltava and Khmelnytskyi regions, school meals are partially provided by vegetables and meat from utilities.

Conclusion

Ukraine, even in the darkest years of the war, not only survived — it was transformed. Thanks to the resilience of communities, the determination of households, the dedication of small farmers, and the support of the state, it managed not only to avoid famine, but also to establish a new model of an agrarian economy: decentralized, local, and sustainable.

This is not just a survival strategy. This experience is critically important for the future economy of Ukrainian villages.