

RECOMMENDATIONS FOR THE AGRICULTURAL SECTOR OF UKRAINE



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INTRODUCTION

Ukraine has traditionally been one of the world's most important food producers. However, with the Russian invasion of February 2022, its agricultural businesses require assistance both in terms of equipment, infrastructure and capacity building. The paper sets recommendations, explaining the problems, possible beneficiaries and topics that can empower the farming community in Ukraine.

The recommendations are organized under three general topics:

1. CAPACITY BUILDING OF FARMERS

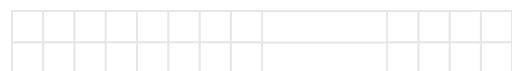
(infrastructure, equipment, skills, cooperation)

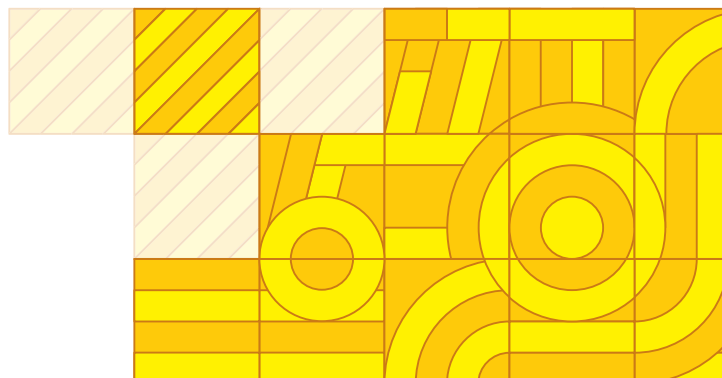
2. SAFETY

(demining and re-cultivation of lands)

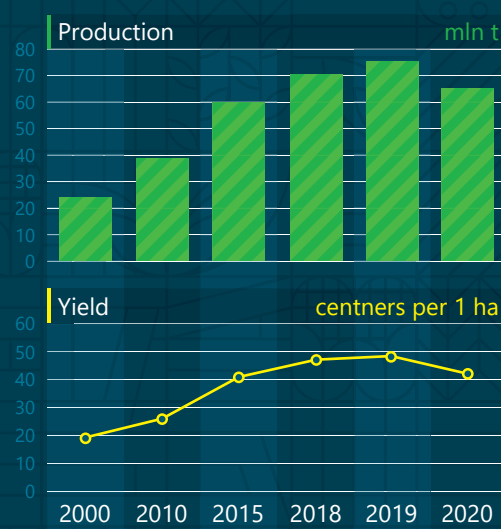
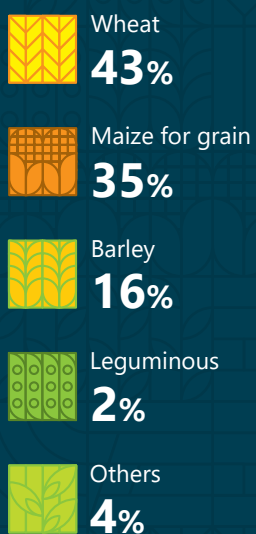
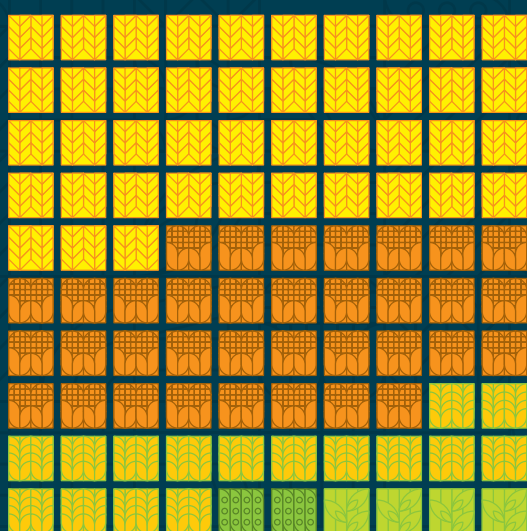
3. EXPORT OF GOODS

(infrastructure and cooperation with the Government of Ukraine)





Structure of the sown area, production and yield (2020)



Source: Report by Ukrainian Agribusiness Club:

<https://www.agroberichtenbuitenland.nl/documenten/publicaties/2021/11/5/ukraine-precision-farming-study>



CAPACITY BUILDING AND INCREASE OF SKILLS OF THE AGRICULTURAL BUSINESSES

1. Financial assistance to re-launch agri-businesses for displaced farmers and farmers whose business assets have been damaged.

Due to the ongoing war, small and medium agri-businesses, but also large agri-companies have been affect-

ed, experiencing a loss of capital or a damage of infrastructure and machinery.



According to the conducted interviews with the agricultural community in Ukraine, farmers face various financial challenges related to high prices on agricultural inputs, lack of equipment, damaged infrastructure, and loss of business due to fleeing from the regions affected by fighting¹.

As noted by one of the interviewees, displaced farmers who lost their businesses and lands, strive to return to the agricultural activities, however lack financial capacities. Some of the farmers were rejected to take a loan from banks, as they are unable to present the required doc-

uments². The second group, farmers who were not displaced and manage to work in their own land, face difficulties related to lack of agricultural inputs due to rising prices, and some of them require equipment (e.g. tractors, refrigerators, barrels for sunflower oil, trucks for importing diesel) and infrastructure (e.g. warehouses, storages and greenhouses)³.

Grants are needed to support the farmers to buy necessary agricultural inputs, to rebuild the damaged infrastructure, and replace the lost equipment.

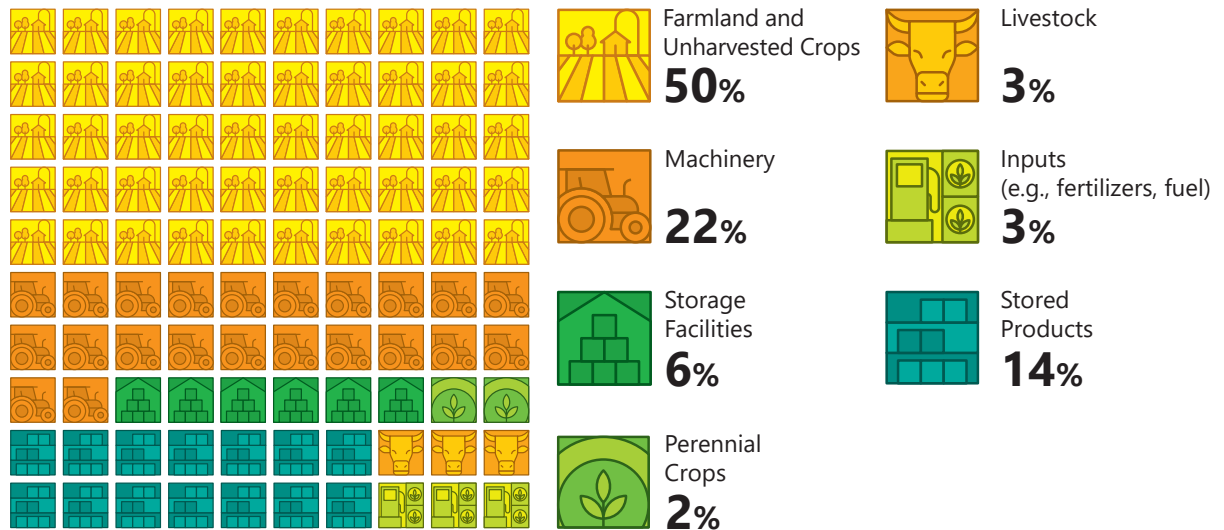
¹ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

² Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

³ Ukraine lost agricultural machinery to the value of 926.1 million dollars. Physical damage is caused to the irrigation infrastructure, tractors, trucks, elevators and other storage facilities which has weakened the agricultural capacity in Ukraine. For further details: <https://kse.ua/agricultural-war-damages-review/> (Accessed: 22 June 2022).



Damaged structure by category



Source: Kyiv School of Economics: <https://kse.ua/about-the-school/news/the-total-war-damages-in-ukraine-s-agriculture-reached-4-3-billion-kse-agrocenter/>

2. Financial assistance for smart technology to deliver sustainable solutions

Prior to the Russian invasion of February 2022, agriculture has been Ukraine's fastest growing industry, and its agri-businesses have strived to introduce modern technology and artificial intelligence. One of the interviewees has noted that with the mass destructions and losses, Ukraine needs not only to rebuild the lost infrastructure, but also focus on smart solutions that would involve ecologically friendly approaches⁴. Farmers in Ukraine have been open to innovation, and female farmers who represent a large share of small and medium agri-businesses were open to use innovative tool. Examples would involve success stories in using less fertilizers and pesticides but receive high yields, finding ways to address climate change issues linked to dry soil and irrigation⁵. There have been various examples of using agri-tech to boost the untapped agricultural potential of the country, such as the precision farming and use of robotics. For example, farmers used drones to gather data

about chemical composition of the soil and to analyse how to irrigate and fertilize crop land. Technology was used that could identify the soil that was not practical to plant and sensors that could measure humidity and temperature⁶. Precision agriculture or satellite farming was used whereby fields and crops were monitored with the help of satellites and machinery-attached sensors through which it was possible to decrease the use of gasoline⁷. But while large agricultural companies in Ukraine have a background of using software solutions, small and medium-sized agri-firms lack technological infrastructure, as well as a trained team to be able to move from a manual to mechanized work⁸.

Support for agri-tech can have a two-fold impact: first it can decrease the negative impact of climate change, provide better solutions in the conditions of the war, second, it can better equip the small and medium agricultural businesses.

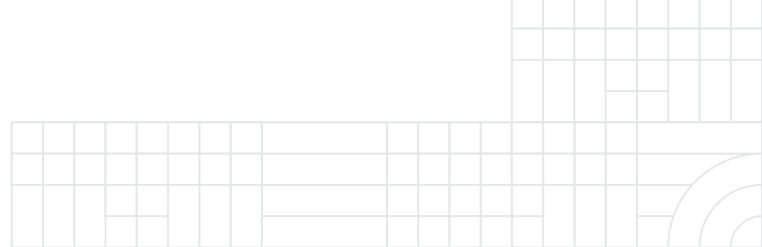
⁴ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

⁵ Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

⁶ Ministry of Agriculture, Nature and Food Quality of Netherlands (2019): <https://www.agroberichtenbuitenland.nl/actueel/nieuws/2019/05/27/how-technology-is-changing-ukrainian-agriculture-for-better> (Accessed: 5 July 2022).

⁷ Zoolatech (2020) 'Agricultural trends 2020. Digital farming in Ukraine. How agricultural technology helps industry boost bottom line', available at: <https://zoolatech.com/blog/agricultural-trends-2020-digital-farming-in-ukraine-how-agriculture-technology-helps-industry-boost-bottom-line/> (Accessed: 5 July 2022).

⁸ The study by Ukrainian Agribusiness Club about precision farming is available at: <https://www.agroberichtenbuitenland.nl/documenten/publicaties/2021/11/5/ukraine-precision-farming-study> (Accessed: 5 July 2022).



3. Capacity building of farmers through study trips to the EU Member States

According to the interviews with the stakeholders, there are 3 main categories of agricultural producers in Ukraine: large corporations, mid-size farmers and small farmers⁹. One of the major challenges for the small and medium farmers is the return to the market chain. One of the interviewees noted that formerly existing cooperation platforms, joint activities and networking events have been disrupted, as some businesses were shut down and others were displaced¹⁰. It is necessary to re-organize the internal and external logistics for farmers to be able to sell their production¹¹. Although the Ukrainian farmers strive to re-engage in the agricultural activities, they need to increase their skills in farming and business development.

According to the stakeholder interviews, study visits and first-hand experience have served as one of the best tools for the Ukrainian farmers to gain skills and implement new approaches in farming. It is necessary to organize study trips for experience exchange which would work both as a tool for transferring skills and as a support for the farmers who lost their assets but strive to return to farming.

In the course of the interviews, the following three topics have been identified as most critical:

- I. European best practices in farming
- II. Use of smart technology
- III. Development of a small and medium farming business and return to the market.

The study trips would increase the skills of the farmers, work as an inspiring experience, and would allow the internally displaced farmers to gain knowledge and confidence to implement their ideas.



THE UKRAINIAN FARMERS NEED
TO INCREASE THEIR SKILLS
IN FARMING AND BUSINESS
DEVELOPMENT.

⁹ Interview with Andrii Dykun, Chairman of the Ukrainian Agrarian Council.

¹⁰ Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

¹¹ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

4. Transferring the skills gained from the study trips to the farmers in Ukraine

As a follow-up activity of the study trips to the EU members states, it will be necessary to spread the gained skills of the farmers among the broader farming community in Ukraine. There will be a significant amount of farmers in Ukraine who would require gaining similar knowledge. Thus, in order to transfer the gained skills, funding can be provided to the participants of the study trips to organize small scale workshops for the farmers in Ukraine to transfer the gained skills and knowledge to their colleagues.

According to the conducted interviews, there are also farmers who are interested in gaining European experience in farming but lack English language skills to be able to participate in the study trips abroad¹². Thus, it is also necessary to organize workshops of English language that

would increase the capacity of farmers who would be interested to go for study trips.

Two types of workshops can be financed:

1.

The study trip participants can continue trainings for the farmers of their local communities in Ukraine.

2.

Workshops of English language can be organized to increase the language skills of the farmers

5. Financial assistance for building cooperation between local authorities and farmers

Ukrainian local-governance system has undergone significant reforms and only two years has passed since the amalgamation of 13.000 communities to 1400. The reforms and activities on the local level have been disrupted due to the war, as local authorities shifted their attention to the organization of civil defense and humanitarian aid. According to the interviews, local authorities need capacity to be able to cooperate with farmers and to identify the needs in the agricultural sector¹³. Local authorities in Ukraine are the main public service providers on the community level but require a support in terms of maintaining professionals who would identify the problems related to agricultural sector.

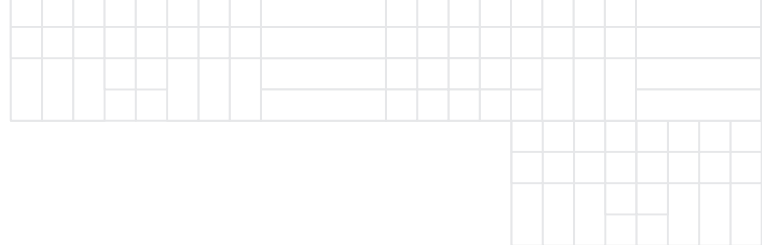
Provide grants to the local authorities to work jointly with the farmers on topics related to ways how to best organize the agricultural activities during the time of war. This would involve active consultation among the local authorities and farmers, and identifying the needs linked to water irrigation, phytosanitary issues, safety problems, as well as organization of supply chains. The grants to the local authorities in various communities would increase the capacity of local authorities, encourage cooperation among the farming community and local authorities, as well as would support them in developing a strategy for overcoming the disruptions of logistics on the community level.



THE GRANTS TO THE LOCAL AUTHORITIES IN VARIOUS COMMUNITIES WOULD INCREASE THE CAPACITY OF LOCAL AUTHORITIES

¹² Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

¹³ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.



6. Financial assistance for restoring cooperation between farmers and NGOs.



CURRENTLY
FARMERS ARE
SPREAD IN
DIFFERENT PARTS
OF THE COUNTRY
DUE TO THE WAR,
AND HAVE LOST
THE ABILITY TO SELL
THEIR PRODUCTION

Prior to the war, there have been about 45,558 agricultural enterprises, such as companies, private enterprises, collective ownership enterprises, farms and state enterprises¹⁴. There has also been a large number of household producers without the status of legal entities that produces 45 percent of gross agricultural output¹⁵. According to the conducted interviews, in order to assist the development of small and medium agricultural enterprises, as well as private households, NGOs specializing in the rights of the farmers, encouraged cooperation among farmers, lobbied for their rights nationally and internationally¹⁶. Nevertheless, with the unfolding war and humanitarian crisis, the civil society sector had to re-organize its activities and focus on the humanitarian crisis in the country¹⁷. It is necessary to support NGOs that closely work with the farmers. As noted by one of the interviewees, currently farmers are spread in different parts of the country due to the war, and have lost the ability to sell their production¹⁸. Although previously Ukrainian producers managed to produce good quality products, after the war, it is difficult for an individual farmer to comply with the regulations and standards, and they require assistance for standardization¹⁹.

Financial assistance can be provided to the NGOs to work with the small and medium farmers on two general topics 'assisting agri-businesses to enter market' and 'raising awareness on legislative changes linked to the agricultural sector'. Under the first topic on 'assisting agri-businesses to enter market', NGOs together with the farmers can develop plans for recovering disruptions in logistical chains, identify supply chains from where to buy agricultural inputs for each region in Ukraine, find ways how to sell the agricultural production in the internal market. In the framework of the second topic on 'raising awareness on legislative changes', financial assistance can increase the capacity of NGOs to collect information about the legislative changes related to the agricultural sector, about new criteria and requirements relevant to the sector due to the EU candidacy status to Ukraine.

¹⁴ Ukrainian Agribusiness Club, Types of agricultural enterprises in Ukraine: https://ucab.ua/en/doing_agribusiness/umovi_vedennya_agrobiznesu/vidi_silskogospodar-skikh_pidpriemstv_v_ukraini (Accessed: 5 July 2022).

¹⁵ International Trade Administration, Ukraine- agricultural sector: <https://www.export.gov/apex/article2?id=Ukraine-Agricultural-Machinery> (Accessed: 5 July 2022).

¹⁶ Interview with Andrii Dykun, Chairman of the Ukrainian Agrarian Council.

¹⁷ For instance, Ukrainian Agrarian Council started to cooperate with farmers through buying food and sending to the Eastern Ukraine, where the population has food shortages.

¹⁸ Interview with Anton Posunko, Co-founder of Evrosem company.

¹⁹ Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

7. Financial assistance to the agricultural businesses to open food processing units.

Due to shelling, Ukrainian farming industry in different regions lost important factories. Several large laying hen farms had to be closed or were destroyed, in some farms, there is a lack of feed for animals. For example, hen farm in Chornobaivka in the Kherson region was cut off from the power supply and the production had to be stopped²⁰. There are also problems with refrigerators, as there is no electricity in several regions of Ukraine, thus, many meat processors have begun shifting from deep freezing to producing canned meat that can be stored at an ambient temperature²¹. Despite the fact that Ukrainian farmers continue their work in the conditions of war²², different communities in Ukraine need food supplies. According to the interviews with the stakeholders, communities in Ukraine face food insecurity due to damages to the major factories. For instance, in Chernihiv region a

large bakery was destroyed, leaving the population short of bread²³. Nevertheless, it should also be noted that due to the blockage of the Black Sea, Ukrainian farmers also do not manage to export their collected harvest, thus, the warehouses are full of collected harvest²⁴.

Financial assistance is necessary for the farmers to launch food processing units in communities across different regions. For example, the row harvest such as wheat and corn can be processed into food (e.g. making pasta, flour, bread). This will first ensure food production on the local level, will put in use the sown harvest, and would also open new employment opportunities. Similarly, small units working on meat production can be launched to replace the destroyed ones that would supply the local communities.



FINANCIAL ASSISTANCE IS NECESSARY
FOR THE FARMERS TO LAUNCH FOOD
PROCESSING UNITS IN COMMUNITIES
ACROSS DIFFERENT REGIONS.

²⁰ FeedMagazine (2022) 'Severe damage in the poultry industry', 22 March. Available at: <https://www.agrarzeitung.de/feedmagazine/feedmagazine-news/ukraine-severe-damage-in-the-poultry-industry-100308> (Accessed: 16 June 2022).

²¹ Mykhaylov, I. (2022) 'Loss of livestock and poultry mount as war in Ukraine continues', Successful Farming, 21 April. Available at: <https://www.agriculture.com/news/livestock/loss-of-livestock-and-poultry-mounts-as-war-in-ukraine-continues> (Accessed: 16 June 2022).

²² For example, as of May 26th 2022, 78 percent of spring grains have been sown. For further information: <https://minagro.gov.ua/en/news/sowing-spring-grains-and-pulses-was-completed-78-last-years-figures> (Accessed: 6 June 2022).

²³ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

²⁴ Interview with Anton Posunko, Co-founder of Evrosem company.

SAFETY OF FARMERS AND RE-CULTIVATION OF DAMAGED FIELDS

1. Financial Assistance to demine the fields



It has become unsafe for the farmers to work in the fields. According to the GICHD report on landmines in Ukraine, it will take years to clear anti-personnel and anti-vehicle mines left behind in Ukraine, and Ukrainian civilians need to increase their awareness about explosive ordnance in the communities²⁵. One of the interviewees noted that during a period of three weeks, only in Kyiv region (10km from capital Kyiv) three tractors were destroyed by mines²⁶. Farmers will need to finance demining activities on their lands, but funds might be unobtainable for many small and medium-sized businesses.

In terms of safety issues
financial support is needed for:

- I. Demining the fields
- II. Trainings for farmers to increase their awareness about mine contamination and safety rules.

NGOs and local authorities specialising in the security issues and demining can be supported to cooperate with farmers in clearing their fields.

²⁵ GICHD (2022) Clearing landmines from Ukraine may take decades; work to find, map, and remove them has already begun. Available at: <https://www.gichd.org/en/what-we-do/our-news/news-detail/clearing-landmines-from-ukraine-may-take-decades-work-to-find-map-and-remove-them-has-already-begun/> (Accessed: 22 June 2022).

²⁶ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

2. Financial assistance to re-cultivate the damaged fields

Apart from the mines, it is also difficult for farmers to work as debris from Russian rockets are found in their fields, there are also charred remains of Russian armored vehicles²⁷. Aerial images also show pockmarked fields, and even if farmers smooth over the top of the soil, underground rubble can act as a barrier for water and make it

harder to grow crops²⁸. Due to debris from missiles fallen on agricultural sites, there is also a contamination of soil and water²⁹. This has been confirmed by interview respondents, who noted that there are fields that are chemically contaminated and need ecological solutions³⁰. Interviewed stakeholders have also noted that the future of damaged fields is under question, and farmers expect to find a solution for re-cultivation of their lands³¹. Prior to growing plants, it is critical to test potentially contaminated patch of soil to see if crops can be grown safely.

Grants can be provided to the local authorities and farmers to identify potentially contaminated areas, and find professional remedies.



²⁷ Kumar, N and Lisnycha, K. (2022) 'Farming on the front lines: how Ukraine's farmers are dodging bombs to feed the world', Grid News, 17 May. Available at: <https://www.grid.news/story/global/2022/05/17/farming-on-the-front-lines-how-ukraines-farmers-are-dodging-bombs-to-feed-the-world/> (Accessed: 22 June 2022).

²⁸ Dzombak, R. (2022) 'Russia's invasion could cause long-term harm to Ukraine's prized soil', ScienceNews, 21 June. Available at: <https://www.sciencenews.org/article/ukraine-russia-war-soil-agriculture-crops> (Accessed: 22 June 2022).

²⁹ Jones, B. (2022) 'The pollution from Russia's war will poison Ukraine for decades', Vox, 2 June. Available at: <https://www.vox.com/down-to-earth/2022/6/2/23143250/ukraine-russia-war-pollution-emissions-environment> (Accessed: 22 June 2022).

³⁰ Interview with Ivan Fursenko, first deputy head of the All-Ukrainian Association of Communities.

³¹ Interview with Oleksandra Harmash and Sofia Burtak, Business Network of Rural Women.

EXPORT OF AGRICULTURAL PRODUCTION

1. Finance transportation

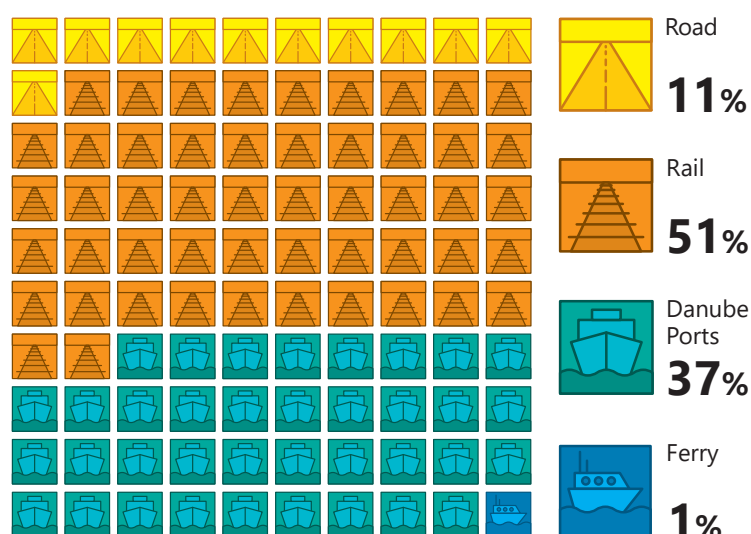
Due to the blockade of the Black Sea, since late February 2022, grain shipments from Odessa and other Western ports have been halted. Usually by late spring, most wheat, barley and sunflower oil exports are typically completed, however due to the blocked ports, an estimated 20 million metric tons of corn and wheat from

the 2021 crop have not been shipped³². Ukrainian government has worked on reorienting export channels and in April-May has started using river ports, such as the port of Reni, and Izmail³³. It has also started to rely on the land routes (through Poland, Romania, Slovakia, and Hungary).

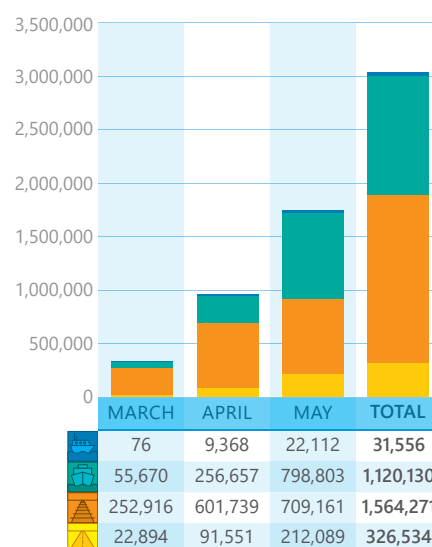


Foreign trade in agricultural products

Distribution of export by mode of transport (for 3 months)



Total export by mode of transport, tons



Source: Ministry of Agrarian Policy and Food of Ukraine: <https://minagro.gov.ua/en/news/export-volumes-certain-types-commodities-and-transport-accordance-unified-automated-information-system-customs-service-ukraine-may-2022>

³² Glauber, J.W. and Laborde, D. (2022) How Russia's invasion of Ukraine is affecting global agricultural markets, The American Enterprise Institute. Available at: <https://www.aei.org/wp-content/uploads/2022/04/How-Russia's-Invasion-of-Ukraine-Is-Affecting-Global-Agricultural-Markets.pdf?x91208> (Accessed: 2 June 2022).

³³ Ministry of Agrarian Policy and Food of Ukraine (2022) Export volumes by certain types of commodities and transport in accordance with the unified automated information system of the customs service of Ukraine May 2022. Available at: <https://minagro.gov.ua/en/news/export-volumes-certain-types-commodities-and-transport-accordance-unified-automated-information-system-customs-service-ukraine-may-2022> (Accessed: 7 June 2022).

However, when trading with the EU countries, it faces lack of sufficient facilities and infrastructure. One of the interviewees noted that there is an issue with the export on the border with the European Member countries, due to different laws connected with the type of trucks: it is required to deliver products by trucks of Euro 5 or 6 within the EU, while in Ukraine mostly Euro 3 or 4 trucks are used. Similarly, there is an issue of incompatibility of Ukrainian railways with the EU standards³⁴. Thousands of wagons and lorries are waiting for clearance on the Ukrainian side, due to the differing rail gauge widths, so most goods need to be transhipped to lorries or wagons that fit the EU standard gauge³⁵.

Farmers and NGOs require financial assistance to address the issues of exporting on the boarder. Financial assistance is required to farmers to buy trucks Euro 5-6, to enable the agri-companies to export the goods through the land border. Assistance will also help to increase the number of staff who are involved in loading trucks and trains on the boarder.

Grants can also be provided to the NGOs specialising in border management, and who can collect information about the changes, requirements and problems on the Ukraine-EU border. NGOs can then lobby and coordinate with the Government of Ukraine on best solutions to decrease the waiting time of exporting the goods.



FINANCIAL ASSISTANCE IS REQUIRED TO
FARMERS TO BUY TRUCKS EURO 5-6, TO
ENABLE THE AGRI-COMPANIES TO EXPORT
THE GOODS THROUGH THE LAND BORDER.

³⁴ Interview with Anton Posunko, Co-founder of Evrosem company.

³⁵ European Commission (2022) Commission to establish Solidarity lanes to help Ukraine export agricultural goods. Available at: https://ec.europa.eu/commission/press-corner/detail/en/ip_22_3002 (Accessed: 7 June 2022).

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