

Abstract

The Transformation of the Agri-Food Products Export Channels from Ukraine: New Opportunities and Challenges [†]

Iuliia Samoilyk * and Dmytro Zhaivoron

Economy and International Economic Relations Department, Educational and Scientific Institute of Economics, Management, Low and Information Technologies, Poltava State Agrarian University, 36003 Poltava, Ukraine; dmytro.zhaivoron@pdau.edu.ua

* Correspondence: iuliia.samoilyk@gmail.com

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The global agri-food market is one of the most important sectors of the economy, providing food for billions of people around the world. Ukraine is one of the key players in the global food market due to its high agricultural potential and large volumes of agricultural production, which several times exceed domestic needs.

The agri-food products export plays an important role in the development of the agricultural sector and the country's economy as a whole. Developed exports activities support the income of agricultural enterprises and the increase in farmers, stimulate the flow of investment, create new jobs, strengthen the country's image as a reliable quality products supplier, open access to new sales markets, and expand opportunities for development. Effective export is not possible without developed export channels, especially when exporting food products that have a limited shelf life and are picky about storage conditions. Therefore, for Ukraine and importers of its food products, under the new conditions of temporary restrictions and forced changes in export channels due to the war with Russia, their development becomes highly relevant.

Analysis of the official statistical data shows steady growth starting from March across all export channels, reaching peak values and relative stabilization from August to November 2022, with the exception of ports and railways, which continue to grow further. The sharp exports doubled in August compared to July 2022 due to the increase in the volume of exports through all channels, and the highest increase was achieved in exports through ports and sea transport, which increased by 2.1 times. Since August 2022, exports through the ports continued to grow and accounted for 60–80% of total exports, which was achieved thanks to active cooperation with the UN and Turkey in the framework of the “Grain Corridor”, which allowed the operation of the ports to be unblocked and their safe use to be guaranteed. In general, the dynamics indicate a low diversification of export channels with a high dependence on ports, which makes Ukraine completely dependent on this export channel and puts it at risk as a domestic product.

Therefore, the war showed the weak points and emphasized the danger of the dependence on one export channel, causing many countries of the world, which were completely dependent on the export of Ukrainian agri-food products, to reach the brink of a food crisis. To reduce the dependence on exports through ports, Ukraine needs to pay attention to the development of other export channels, but the main and permanent importers of Ukrainian products are the countries of Asia and Africa, to which exports in a situation of war with Russia are possible only with the use of ports. To reduce the share of exports through ports, Ukraine needs to increase the volume of exports of agri-food products to



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EU countries and develop internal infrastructure and customs checkpoints with friendly neighboring countries. The agricultural products export from Ukraine can be related to the concept of Industry 4.0 through modern technologies and digitization implementation in the agricultural sector. Industry 4.0 encompasses the use of technologies such as the Internet of Things (IoT), artificial intelligence (AI), data analytics, automation, and robotics. These technologies can be applied in agriculture to enhance productivity, quality, and production efficiency.

For example, data analytics and artificial intelligence can be used for demand and market trends forecasting, and for optimizing the logistics of agricultural product exports. This enables proper planning of the sowing, production, and delivery of products to external markets.

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