Proceeding Book of ISESER 2023

P 5. CORN PRODUCTION AND EXPORT OPPORTUNITIES IN UKRAINE DURING TIMES OF WAR

Olena Demyanyuk¹, Lyudmyla Symochko^{1,2,3*}, Oleksandr Poltava¹, Olena Naumovska⁴

¹Institute of Agroecology and Environmental Management, Kyiv, Ukraine ²Uzhhorod National University, Uzhhorod, Ukraine; ³University of Coimbra, Coimbra, Portugal; ⁴National University of Life and Environmental Sciences of Ukraine, Kviv, Ukraine

E-mail: lyudmilassem@gmail.com

ABSTRACT: Corn, as a cereal crop, maintains its leading position in the global agri-food market thanks to its versatile uses. Ukraine, benefiting from favorable soil and climatic conditions, has been a significant corn exporter to the global market and held the sixth position among leading countries until 2022. It produced approximately 35.5 million metric tons, accounting for 3.2% of the world's total corn production. However, in 2022, due to active hostilities, disruptions in logistics, supply chain issues for fertilizers, plant protection products, seeds, and fuel for agricultural machinery, as well as landmine contamination and other factors, the corn cultivation area decreased by 22%. Consequently, gross production decreased by 37.8% compared to the previous year, reaching approximately 27 million tons. This shift in production caused Ukraine to slip two positions in the world rankings of corn-producing and exporting countries. In the unstable conditions of 2023, marked by ongoing warfare, blockades of Ukrainian ports, and declining prices in the domestic market, the corn cultivation area has further decreased to 3.4 million hectares. In the 2021/2022 MY, Ukraine's main exports of corn were directed to China, Spain, Romania, Turkey, and Egypt, with estimated values of \$1,449 million, \$745 million, \$598 million, \$414 million, and \$412 million, respectively. It is essential to consider that substantial areas of agricultural land may temporarily become unsuitable for their intended use due to environmental issues stemming from the conflict. Therefore, Russia's extensive invasion of Ukraine has had a detrimental impact on all sectors of the economy, including agriculture. Occupied territories, landmines, and other factors have led to a reduction in corn cultivation areas, negatively affecting Ukraine's export potential and potentially impacting global food security.

Keywords: Food security, War in Ukraine, Global Maize Production