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CEREAL FLOWS IN THE EUROPEAN UNION – ROMANIA'S CONTRIBUTION

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Abstract: In the last decade, the cereal flows in the European Union saw important changes due to geo-political shifts generated by the military conflicts in Ukraine and Near and Middle East. It influenced the transportation routes and costs. On the other hand, climate changes influenced productions, in volume and quality. The present paper explores the changes occurred in the last decade for wheat, barley and maize in terms of production and trade.

Introduction

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Material and method

The paper analyses trade flows of wheat and maize in the EU and Romania, exports, imports and geographical destinations. The research methodology is primarily based on analysis of statistical data (from recognized sources such as Eurostat, and Romanian National Institute of Statistics), with focus on EU and Romania, accompanied by a large literature review of the most recent bibliographical sources.

Results and discussions

Despite modern technologies, crop productions are still much dependent on climate conditions; and climate changes, through increased frequency of droughts and floods (2018, 2020, 2024) influenced significantly the production volumes and quality in various wheat producing areas in the EU. The variation coefficient calculated for the last 10 years in the top producer countries is an indicator of such a dependence: 12% in France, 10% in Poland, 16% in Romania, 22% in Spain, or 12% in Bulgaria.

EU is an important net exporter on the global wheat markets, with annual exports between 22-36 million tonnes. Half of the exports are going to Algeria, Morocco, Saudi Arabia, Egypt, Nigeria and UK (2016-2025 averages). Main wheat exporters were France (9 million tonnes yearly, average 2016-2025, 31% of total EU wheat exports to non-EU destinations), while Romania ranked second, with 18% of the total EU wheat exports, that is 5.3 million tonnes yearly, average 2016-2025).

Romania is also a net wheat exporter. Most of its wheat exports went to non -EU destinations (Figure 1). Only between 14-21% of the Romanian exports went to the EU (the only one exception was 2018 (42%).

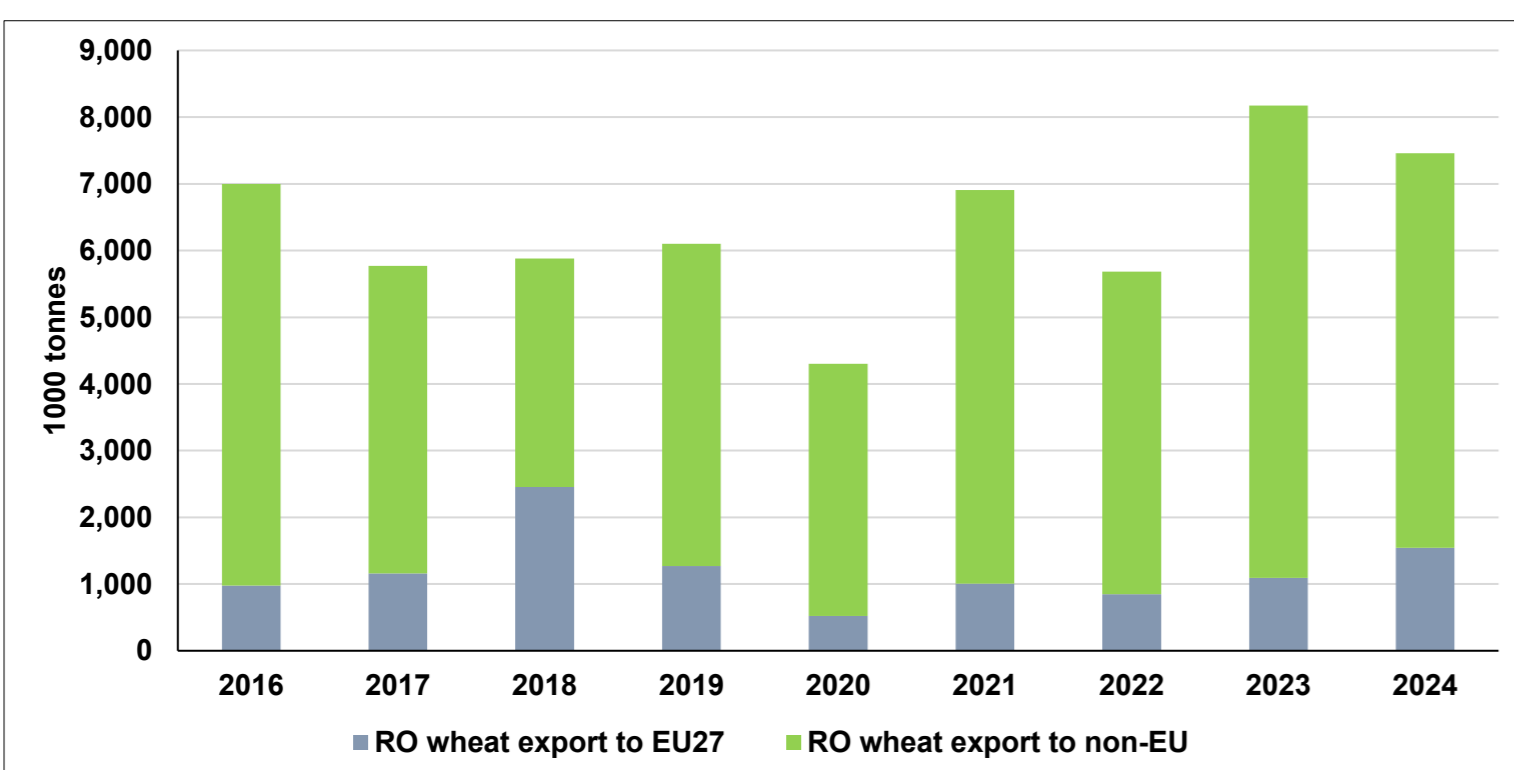


Figure 1. Romanian wheat exports by destination

Among the EU countries, Romanian wheat went mostly to Spain, Italy and Germany (Figure 2).

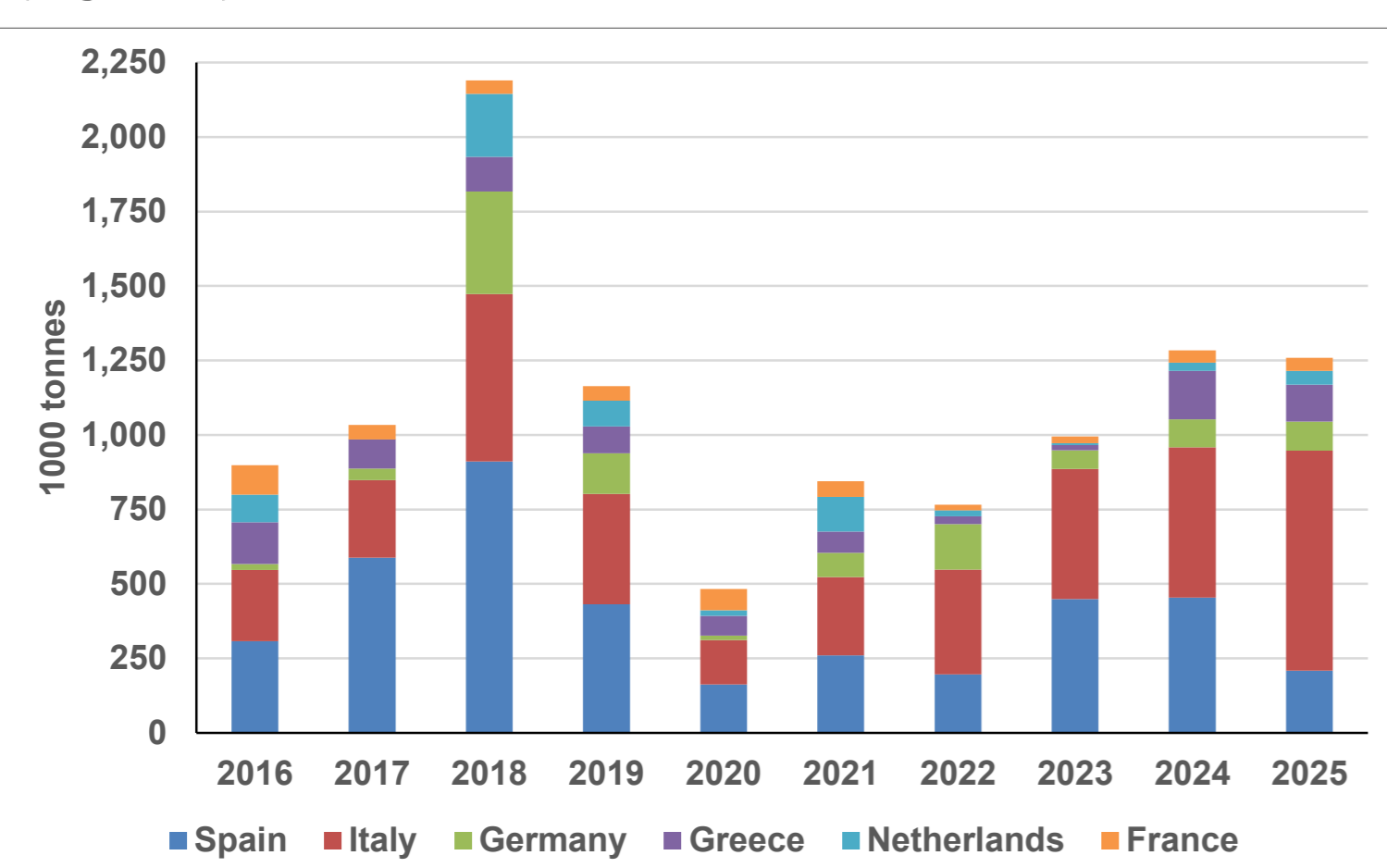


Figure 2. Romanian wheat exports to EU countries

Wheat exports to non-EU countries increased in the last five years, with major destinations Egypt, Jordan (decreasing), and Saudi Arabia becoming an important new destination at the expense of Sudan and Israel (Figure 3).

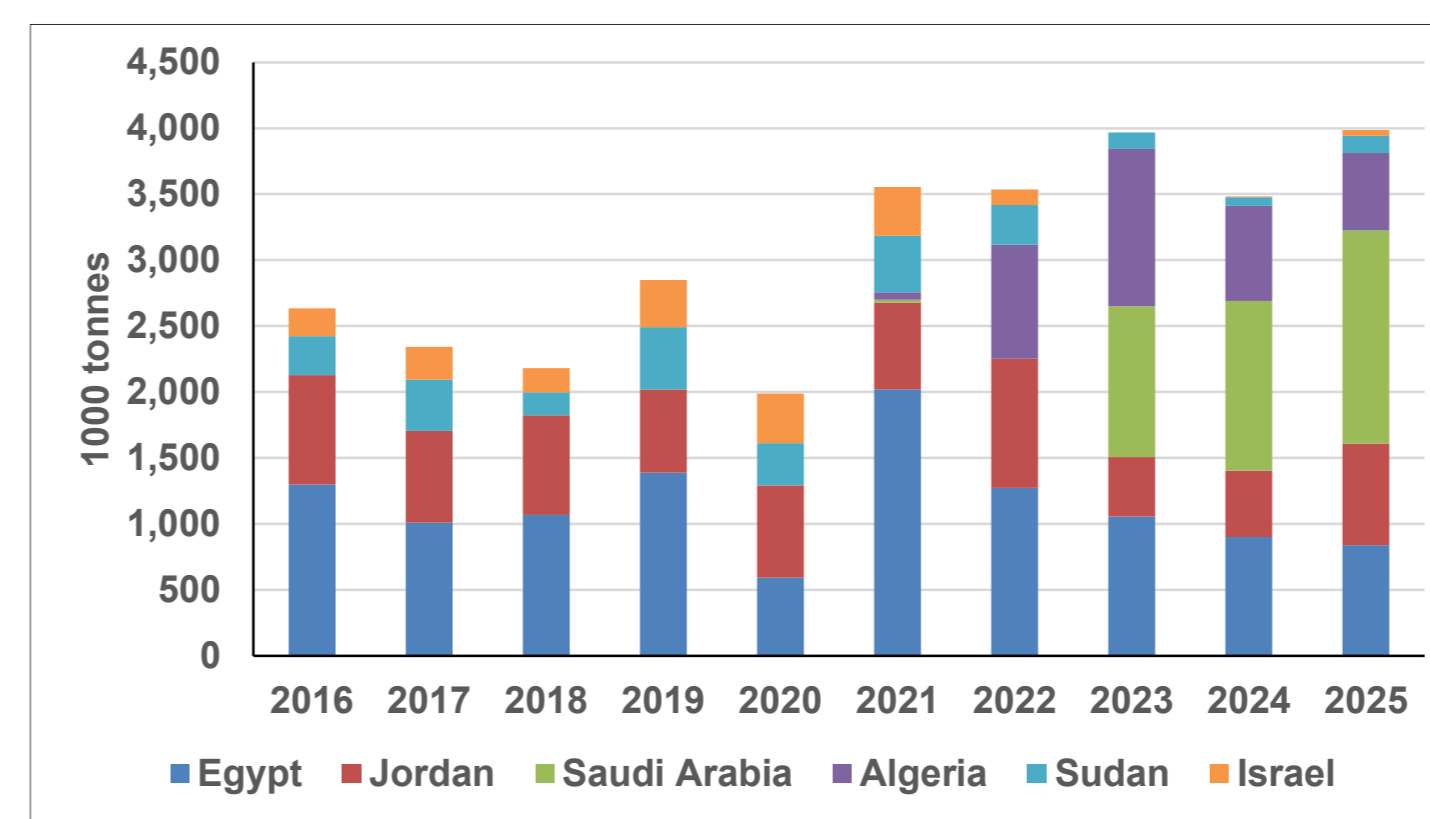


Figure 3. Romanian wheat exports to non-EU countries (source: calculations based on Eurostat data)

EU is a net importer of maize, while Romania is a net exporter. Between 2016-2022, more than half of Romanian maize exports went to the EU (Figure 4).

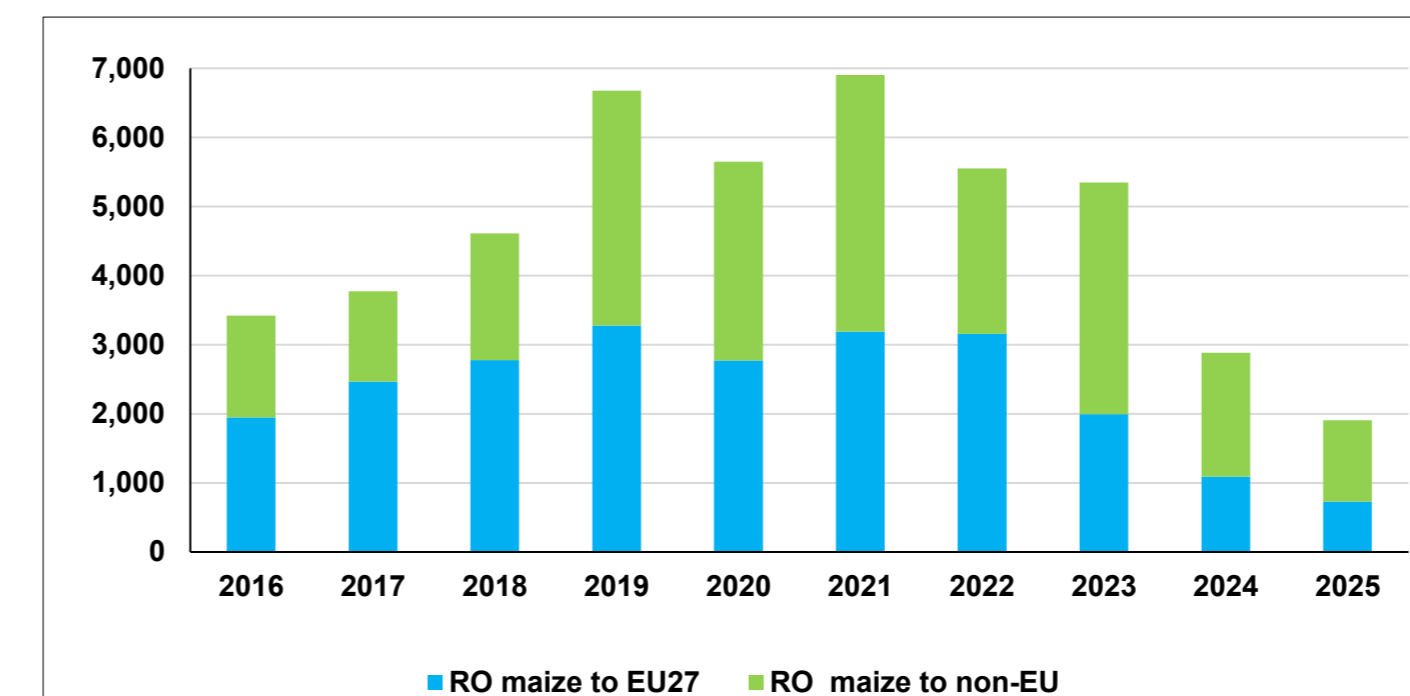


Figure 4. Romanian maize exports by destination

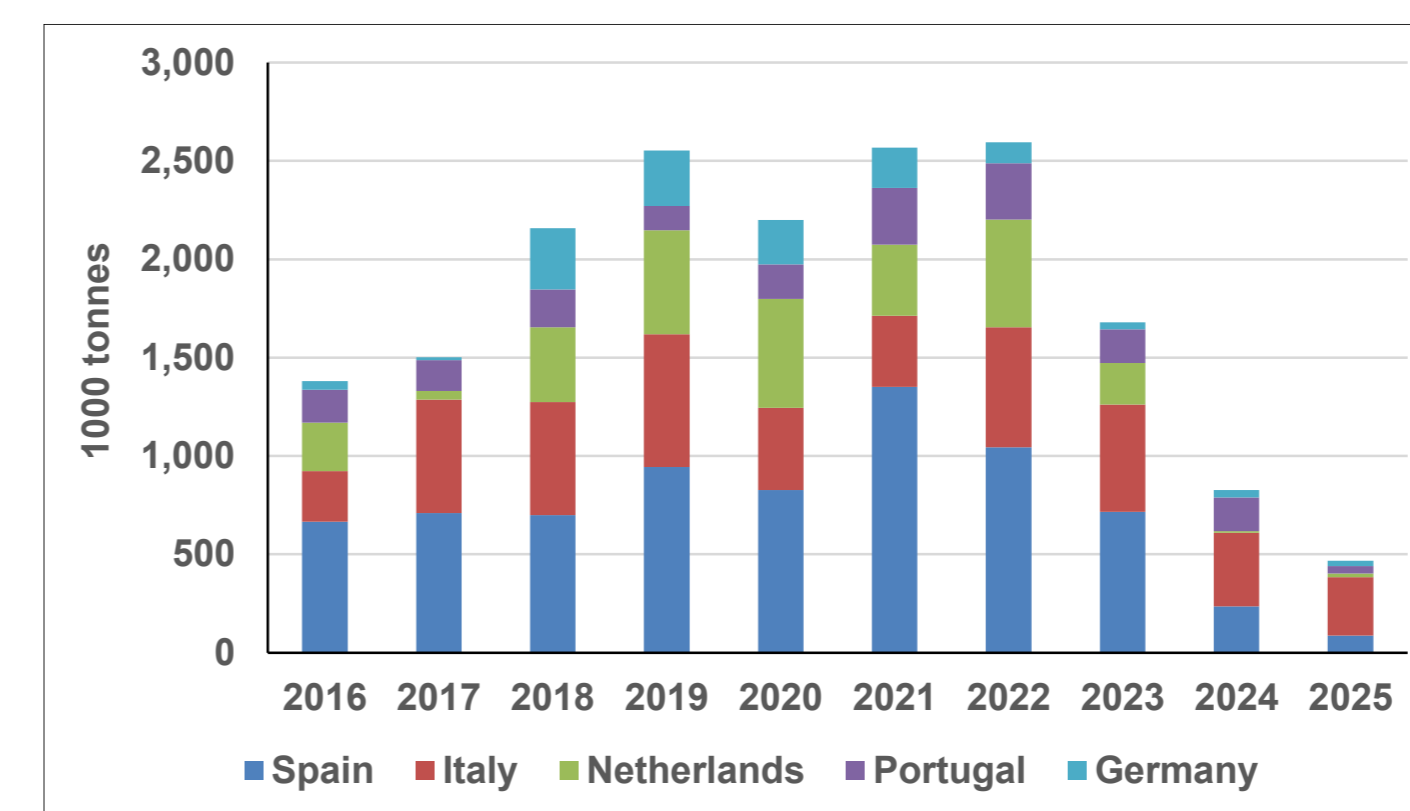


Figure 5. Romanian maize exports to EU countries

Most of the Exported maize to the EU went to Spain and Italy (figure 5), while those to the non-EU countries were directed mainly to Turkey, Egypt and South Korea.

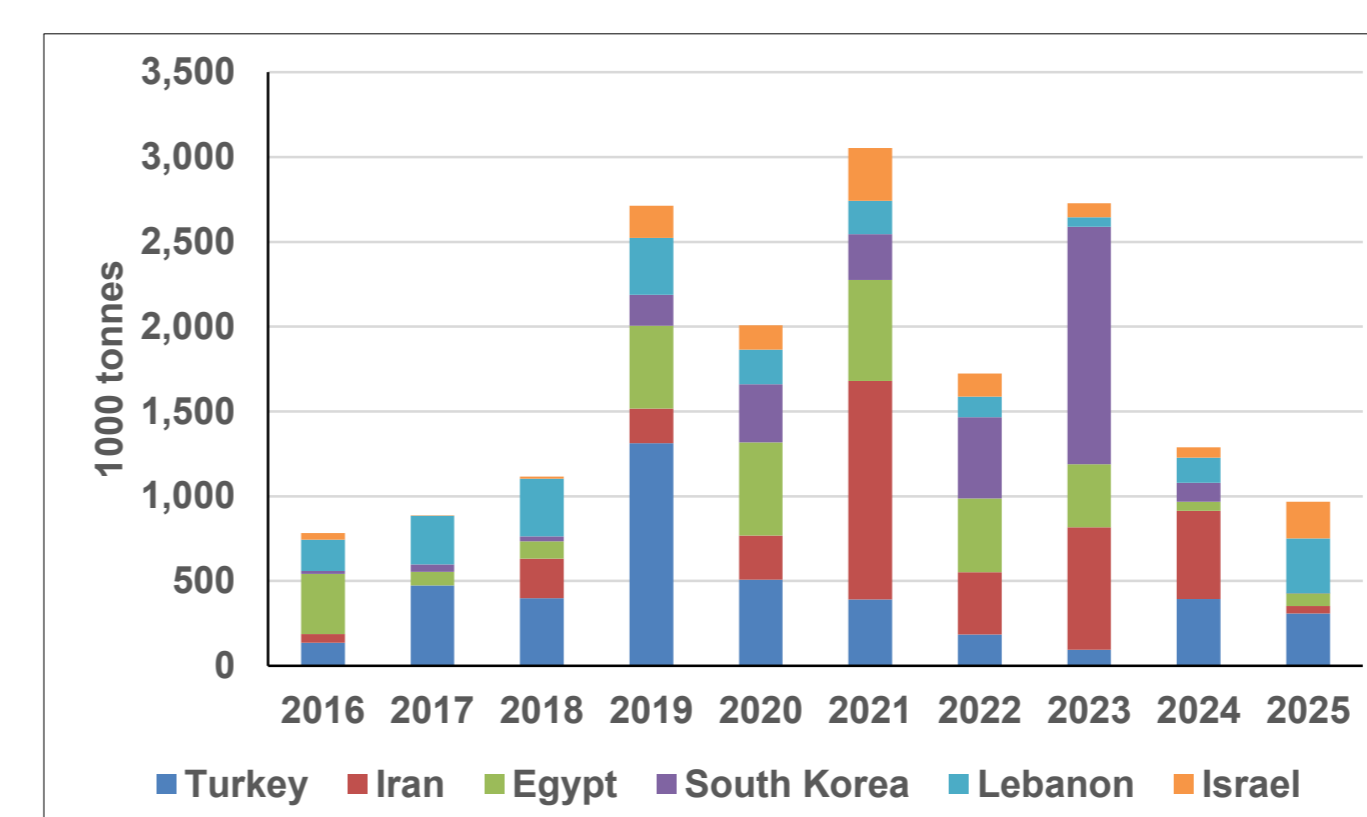


Figure 6. Romanian maize exports to non-EU countries

Conclusions

Major changes occurred in the EU cereal (wheat and maize) flows in the last decade. Romania exported increasing volumes of wheat and maize, redirecting its exports mainly to non-EU destinations.