

ROMANIA'S POSITION IN THE WORLDWIDE TRADE WITH SUNFLOWER AND RAPE SEEDS

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Abstract

Romania is an important agricultural producer in the Black Sea basin, which benefits from pedoclimatic conditions favourable for the cultivation of oil plants. In this context, the paper aims to identify the position occupied by Romania in the global trade of rapeseed and sunflower seeds, for the period 2018-2022. To this end, quantitative and value imports and exports were analysed for these product categories, based on the statistical data available on specialized websites such as ITC. The results of the study show that Romania was the most important exporter worldwide, both in terms of value and quantity, of sunflower seeds in the period 2018-2021. In 2022, it lost the 1st place to Ukraine. Rapeseed ranked 5th in terms of exported quantity and 6th in terms of export values, among the world's top exporters. Also, Romania registered an increasing trend in the imports of sunflower and rapeseed for the studied period, especially in 2022. Imports of sunflower seeds placed Romania on the 4th place, and those of rapeseed on the 11th place in terms of quantity and respectively 12th for value.

Key words: exporters, importers, rapeseed, Romania, sunflower seeds, trade

INTRODUCTION

Romania's geographical position has generated a favourable climate and a fertile soil favourable to the cultivation of oleaginous plants in general and sunflower and rapeseed in particular. Romanian farmers were not interested in cultivating rapeseed, but recent macroeconomic changes [4], the development of hybrids resistant to pests and diseases [5] and the non-reimbursable European funds that stimulated agricultural production [14, 16] or the production of biofuel have changed this aspect [18].

In this way, in the year 2022, at the level of the European Union, Romania ranked first in terms of the area cultivated with sunflowers - 1,081,790 ha, and in 3rd place for the production obtained - 2,079,010 tons. In rapeseed, Romania occupied the fourth place both in the ranking of growers and producers, with 466,800 ha cultivated and a production of 1,222,640 tons [10].

It should be noted that among the oleaginous plants cultivated in the EU, the largest areas were occupied, in order, by rapeseed (59%), sunflower and soybean.

Oilseeds have been used to produce food and fuel, as animal feed, as well as for industrial purposes [9].

In Romania, in 2022, 8,005,889 ha were sown or planted in "own fields" (in Romanian "ogor propriu") [12]. Of these, the largest area was cultivated with corn - 30%, followed by wheat - 27% and oleaginous plants: sunflower - 14% (1,093,265 ha) and rapeseed - 6% (468,870 ha) – Figure 1.

The preference of Romanian farmers to grow more sunflowers among oilseed plants is still noticeable, different from the general trend manifested at the European level, but recently rapeseed is gaining their trust [3].

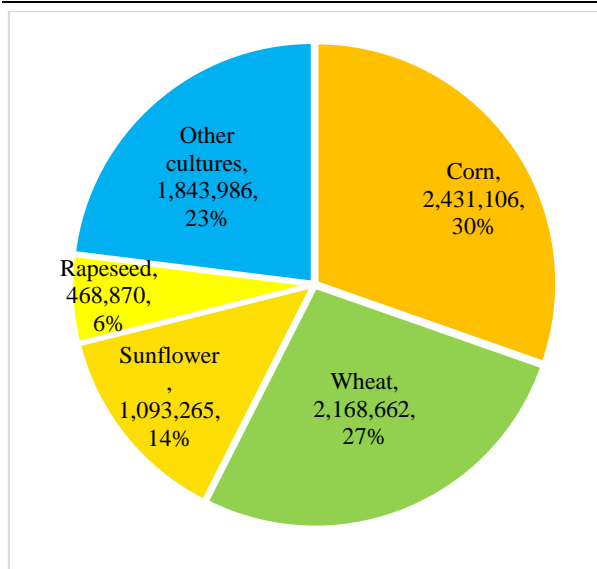


Fig. 1 The share of areas occupied by the main agricultural crops, in 2022, in Romania.
 Source: own representation after [12].

In 2022, in the general ranking of Romanian exports, oleaginous plants included in the category "Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder" were ranked 13th, with a value of \$2,136,739 thousand and represented 2.21% of Romania's total exports. During this time "Cereals" were in 5th place, with a value of \$4,588,275 thousand, which represented 4.74%. The first place was occupied by "Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles" [13].

The analysis of the data available worldwide showed that the value exports of sunflower seeds increased in the period 2018-2022 by 64.61%, and the values recorded by the first 12 world exporters in 2022 represented 88.32% of the total. For world quantitative exports, the increase was 37.43%, and the first 12 ranked in 2022, together exported 93.42% of the total of 8,172,322 tons of sunflower seeds.

Global rapeseed exports in value terms increased by 68.82% in the analysed period. In 2022, the top 12 states together accounted for 90.85% of the total value of \$17,537,480 thousand.

The value of world imports of sunflower seeds was \$7,510,156 thousand in 2022, with an increase of 82.46% compared to 2018. The first 12 of the world ranking of importers accounted for 70.36% of the total.

Total value imports of rapeseed worldwide increased by 59.60% in the analysed time frame. 86.97% represents the percentage held by the imports of the first 12 world importers of the total [13].

In this context, the article will highlight the quantitative and valuable imports and exports of rapeseed and sunflower seeds of Romania and specify the place occupied by our country in the ranking of important players in this field.

MATERIALS AND METHODS

In this article the world oilseeds trade was analysed, highlighting the main importers and exporters of sunflower and rapeseed worldwide, in terms of quantity and value and the position occupied by Romania in this ranking was identified.

To obtain the data, the bibliographic method was used, and the studied period was 2018–2022. The analysed indicators were the quantities of sunflower and rapeseed exported and imported by Romania and the values of exports and imports for these categories of oleaginous plants.

The statistical data which was processed based on statistical data obtained from the International Trade Centre [13] website was processed and then represented graphically.

RESULTS AND DISCUSSIONS

Worldwide, in 2022, Ukraine was the main exporter of sunflower seeds, followed by Romania with an export value of \$1,166,091 thousand and Bulgaria with an export value of \$724,980 thousand (Figure 2). It is worth noting that Ukraine's sunflower seed exports accounted for 18.67% of the world's total sunflower seed exports, Romania's 17.24%, and Bulgaria's 10.72%.

As can be seen, the value exports of sunflower seeds of Ukraine increased from \$28,231 thousand in 2018 to \$1,263,155 thousand in

2022 (4,474.35%). Almost 80% of the total went to European Union countries and 19% to Turkey [8].

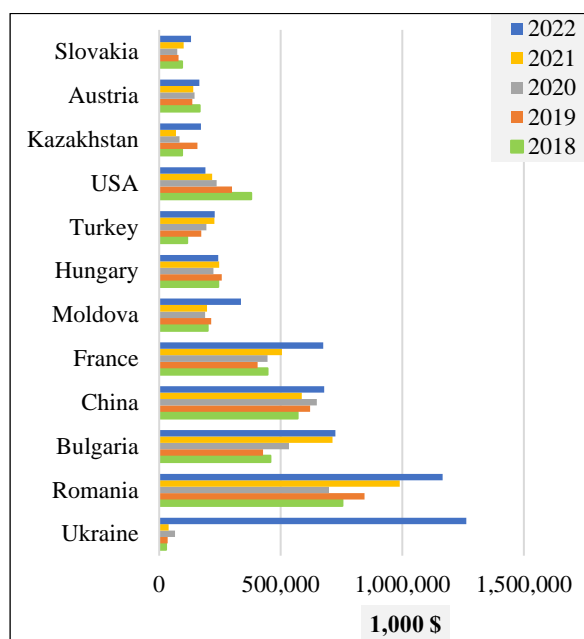


Fig. 2. Main sunflower seeds exporters worldwide* – value, 1,000 \$.

* reporting to the year 2022

Source: own representation after [13].

In 2018-2021, Ukraine did not rank among the largest exporters of sunflower seeds. Since 2022, export values have increased. Compared with 2021, they increased with 3,223.49% in 2022 thanks to EU support [2]. Romania ranked first, in the period 2018-2021, in the top exporters of sunflower seeds in terms of value. In 2022, although it had an increase in the value of exports by 54.73% (meaning \$1,166,091 thousand), compared to 2018, it was positioned in 2nd place, with a difference of \$97,064 thousand compared to Ukraine. Although it was the world leader at that time, Romania recorded the lowest value for sunflower seeds exported in 2020, \$698,733 thousand.

Other countries in the top world exporters in this category were: China, France, Moldova, Hungary, Turkey, USA, Kazakhstan, Austria and Slovakia. We can conclude that six EU member states were in this ranking and respectively five states from the Black Sea area, which is also an important cereal basin [7].

Among the main exporters in terms of value of sunflower seeds, also recorded decreases in 2022 compared to 2018: Hungary – 0.30%, USA – 49.66% and Austria – 0.62%.

From the data presented in Figure 3, it emerged that Ukraine exported the largest quantities of sunflower seeds in 2022, 2,767,006 tons, with an increase of 4,713.49% compared to 2018 (58,704 tons). Thus, Ukraine moved to first place, ahead of Romania, which held this position in the period 2018-2021. In third place was Bulgaria, which recorded a decrease in exports of 16.20%. In this ranking there were 5 EU member states and respectively 6 states from the area of the Black Sea basin.

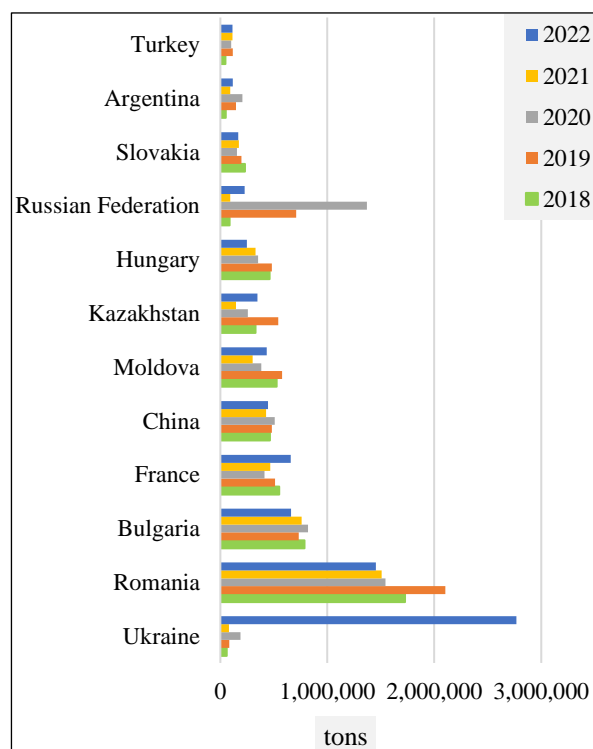


Fig. 3 Main sunflower seeds exporters worldwide* – quantitative, tons.

* reporting to the year 2022

Source: own representation after [13].

In 2022, Ukraine and Romania's sunflower seed quantitative exports account for 33.86% and 17.79% of the world's total sunflower seed exports respectively. Values in other federal states are below 8%.

From 2018 to 2021, Ukraine ranked last among the 12 largest sunflower seed exporting countries (quantitative). Instead, in

the year 2022 it was in first place, the increase recorded being 3,502.14%, compared to 2021. Although it was the world leader, Romania's quantitative exports registered a decrease of 15.83% in 2022 (meaning 1,453,463 tons), compared to 2018, which was considered a good agricultural year for sunflower crop [15]. Also in 2019, there were favourable conditions for the development of sunflower plants [6] and the largest amount of exported sunflower seeds was recorded, 2,104,662 tons. Due to the fact that it has limited processing capabilities, Romania exported most of its harvest. Thus, almost 2/3 of the harvest was delivered to Bulgaria (approximately 400,000 tons/year), Turkey (approximately 400,000 tons/year), Hungary (approximately 220,000 tons/year), to Western European countries or to Asian countries [1, 17]. Half of the most important 12 exporters recorded decreases in the quantities of sunflower seeds traded in the period 2018-2022 (Romania, Bulgaria, China, Moldova, Hungary and Slovakia). The biggest decrease was registered by Hungary - 46.08%.

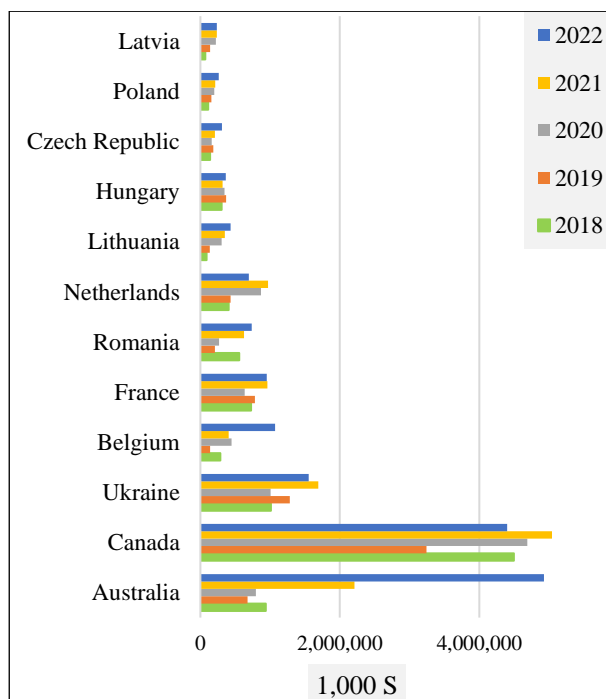


Fig. 4. Main rapeseeds exporters worldwide* – value, 1,000 \$.
 * reporting to the year 2022
 Source: own representation after [13].

The main exporters of rapeseed for the analysed period can be found in Figure 4. It

can be seen that, apart from the first 3 ranked, the other 9 states are members of the EU. Australia (\$4,927,169 thousand), Canada (\$4,396,657 thousand) and Ukraine (\$1,551,024 thousand) occupied the first 3 positions, and Romania took the 6th place, with \$734,524 thousand in 2022. With the exception of Canada, which had a 2.24% decrease in export values, the other states in the Top 12 recorded increases. Australia (525.46%), Belgium (376.27%) and Latvia (345.21%) had the biggest increases. Compared to 2021, in 2022 Australia doubled its export value (223.18%). The value exports of rapeseed for Romania represented 4.19% of the total, in 2022, and the increase in the period 2018-2022 was 32.45%. Romania was the 3rd EU country, after Belgium (4th place) and France (5th place), which was among the top 12 world exporters of rapeseed. The lowest value obtained from rapeseed exports was in 2019 - \$206,216 thousand.

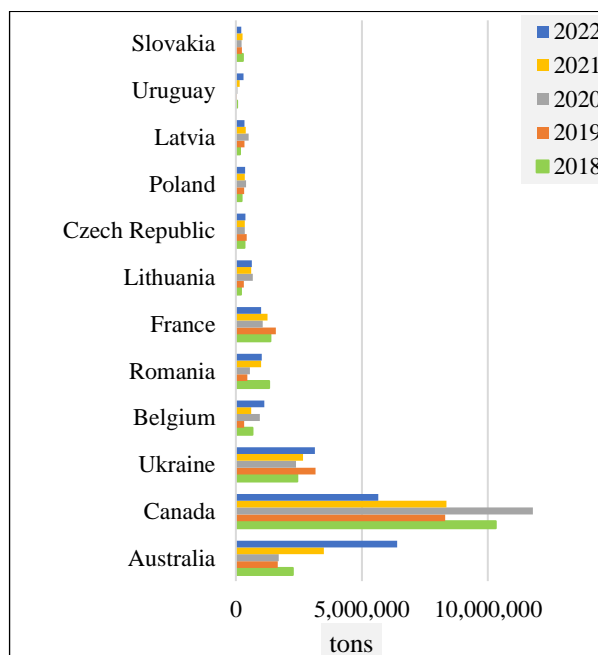


Fig. 5. Main rapeseeds exporters worldwide* – quantitative, tons.
 * reporting to the year 2022
 Source: own representation after [13].

On the first places in the top of the world rapeseed exporters at a quantitative level were Australia, Canada and Ukraine, which exported 6,395,425 tons, 5,651,642 tons and,

respectively, 3,136,246 tons in 2022 (Figure 5). In 2022, Australia almost doubled the amount exported, compared to 2021 (183.18%).

In general, the quantitative exports of rapeseed registered increases in the period 2018-2022, with the exception of Canada, Romania, France and Slovakia. Canada had the biggest decrease - 45.19%.

Romania's quantitative rapeseed exports fluctuated during the analysed period and decreased in 2022 by 22.64%, compared to 2018. The amount of 1,021,306 tons exported in 2022 placed Romania in 5th place in the top exporters. The lowest exported quantity was recorded in 2019, 460,019 tons. At the same time, Romania was the 2nd country in the European Union, after Belgium (4th place), in the top exporters of rapeseed.

The analysis of the data on the world value imports of sunflowers (Figure 6) indicated that Bulgaria was in the first place in the top importers in 2022, with \$1,012,206 thousand. Turkey ranked 2nd, with \$647,689 thousand and the Netherlands – \$539,683 thousand.

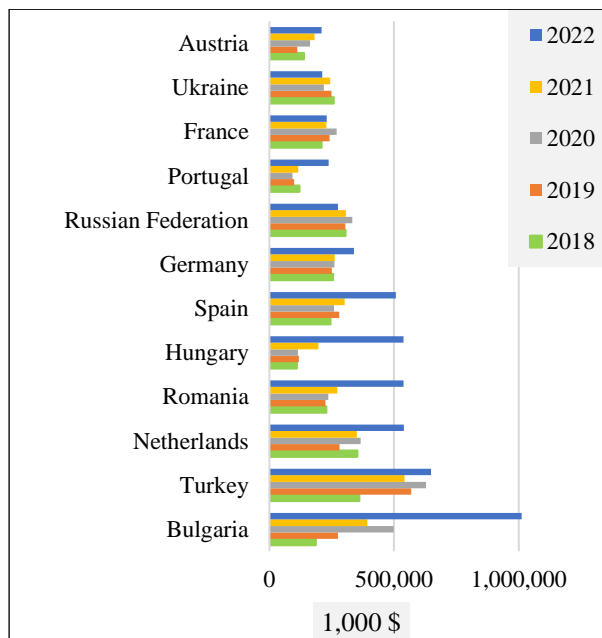


Fig. 6. Main sunflower seeds importers worldwide* - value, 1,000 \$.

* reporting to the year 2022

Source: own representation after [13].

Value imports of sunflower seeds increased in 2022 compared to the values of 2018 for most of the states in the top importers. Exceptions

were made by the Russian Federation and Ukraine, where decreases of 10.10% and 17.92% were recorded, respectively.

The presence of nine of the EU member states in this ranking of importers is noteworthy.

Although it was an important exporter of sunflowers, Romania found itself in the top 12 importers in position 4, registering \$538,098 thousand in 2022. During the period under analysis, Romania's value imports increased in 2022, compared to 2018 (235.79%), in parallel with the increase in exports. The country from which Romania's sunflower imports mainly originated was Ukraine [8]. The lowest amount imported was in 2019, \$224,795 thousand.

In 2022, Bulgaria's value imports represented 13.48%, Turkey's - 8.62%, the Netherlands' - 7.19% and Romania's - 7.16%, of the total world imports of sunflower seeds.

The analysis of the quantitative imports of sunflower seeds (Figure 7) showed that Bulgaria, Turkey and Romania kept their positions in the ranking of value imports.

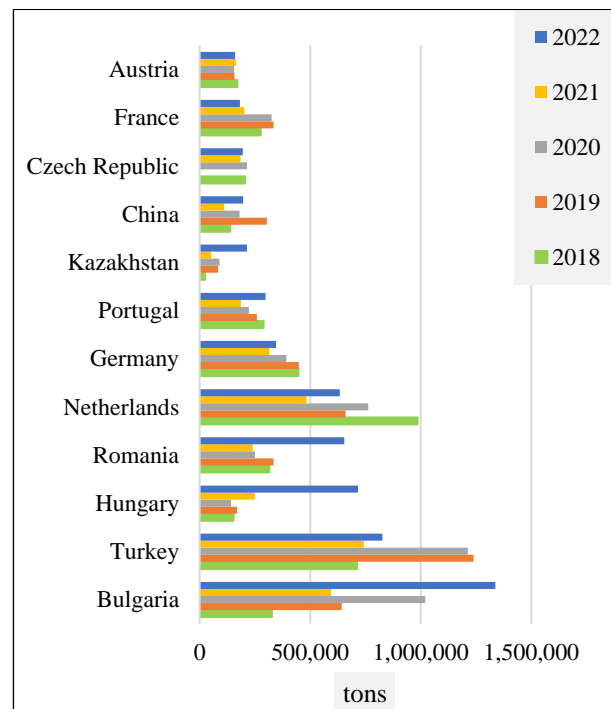


Fig. 7. Main sunflower seeds importers worldwide* - quantitative, tons.

* reporting to the year 2022

Source: own representation after [13].

Thus, in the first place was Bulgaria, which imported the largest amount of sunflower seeds, 1,337,262 tons in 2022 and doubled the

amount imported compared to 2021. The increase for the period under analysis was of 408.80%.

The 2nd place was held by Turkey, with an increase of 116.05%, and on the 3rd place was Hungary, where the imported quantity increased by 468.62%.

In the 4th position, Romania reported a 207.34% increase in the amount of sunflower seeds imported in 2022 compared to 2018, i.e. 653,668 tons. Imported quantities varied from year to year, and in 2021 the lowest quantity was mentioned - 240,625 tons.

In 2022, quantitative imports of sunflower seeds increased compared to the values of 2018 for some of the states in the top importers, and for others they decreased: Netherlands, Germany, Czech Republic, France and Austria. The Netherlands had the biggest decrease - 35.67%, and the biggest increase in the imported quantity - Kazakhstan, 863.47%.

Regarding the world importers of rapeseed, from a value point of view, (Figure 8) Germany, Japan and Belgium held the first 3 places with the following values for the year 2022: \$4,403,503 thousand, \$1,966,880 thousand and \$1,808,386 thousand, respectively.

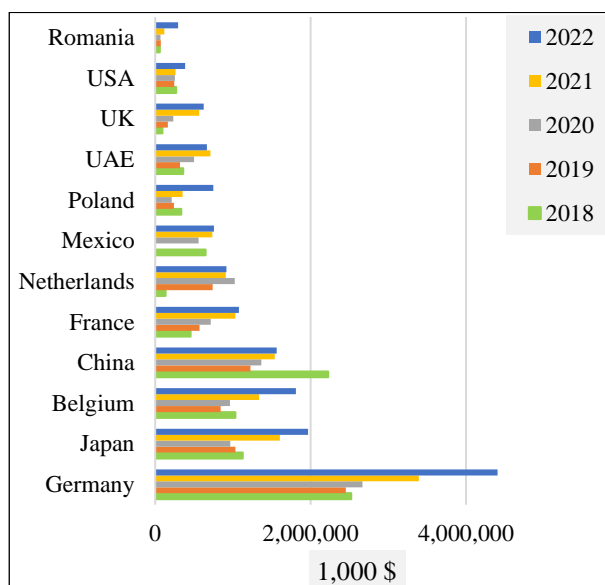


Fig. 8. Main rapeseed importers worldwide* - value, 1,000 \$.

* reporting to the year 2022

Source: own representation after [13].

A total of 6 EU member states are among the most important importers. Germany's value imports in 2022 represented a quarter of the total and increased by 59.60% compared to 2018. For Japan, the increase was 74.73%, and for Belgium - 75.57%.

Also, from the analysis of the data presented by the International Trade Centre [13], it was noted the increase in the values of imports in the analysed time interval for other countries as well. The Netherlands had the biggest increase - 678.30%. China was the only one that registered a decrease in import values of 29.71%.

Romania ranked 12th in the ranking. In 2018 it imported rapeseed worth of \$58,662 thousand, and in 2022 \$293,698 thousand, which means an increase of 500.66%.

The analysis of the quantitative imports of rapeseed (Figure 9) showed that the first 4 countries in the ranking recorded decreases in the quantities of imported rapeseed: for Germany - 5.94%, Belgium - 3.46%, Japan - 10.12% and China - 58.78% (the biggest drop).

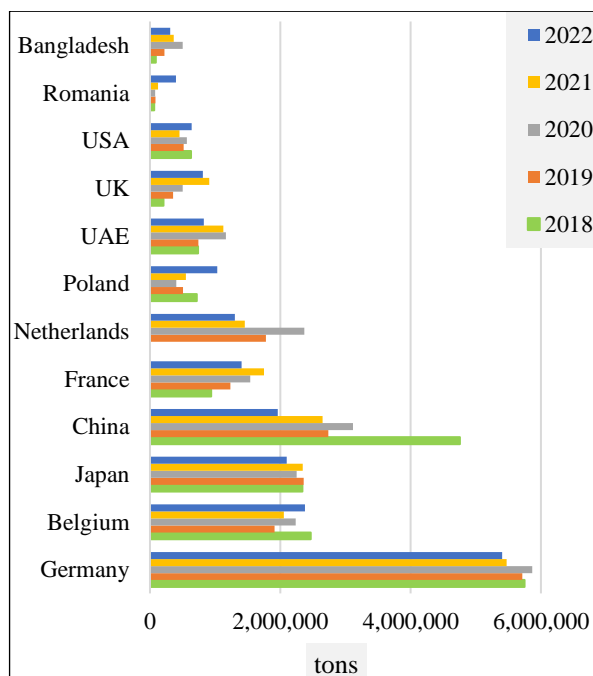


Figure 9. Main rapeseed importers worldwide* - quantitative, tons.

* reporting to the year 2022

Source: own representation after [13]

The largest amount of rapeseed was imported in 2022 by Germany - 5,405,041 tons. The

2nd place was held by Belgium, with approximately half of the quantity imported by Germany - 2,379,932 tons. Ranked 11th, Romania recorded a 498.93% increase in the amount of rapeseed imported in 2022 (398,126 tons) compared to 2018 (66,473 tons). The analysis of “The Supply Balances for the main agri-food products” [11] highlighted the fact that in 2021 Romania exported approximately half of the resources of rapeseed and sunflower seeds, meaning 40.25% for sunflower and 61.57% for rapeseed (Table 1).

Table 1 Share of imports and exports in the supply balances for sunflower and rapeseed in 2021

	Sunflower seed		Rapeseed	
	1,000 tons	%	1,000 tons	%
Total resources	3,760.20		1,634.80	
of which:				
- Total imports	240.9	6.41	125.4	7.67
Internal use of which:				
- industrial use	1,290.20	34.31	396.5	24.25
- seeds	1,283.10	99.45	391.3	98.69
- losses	5.60	0.43	3.6	0.91
	1.50	0.12	1.6	0.40
Total exports	1,513.60	40.25	1,006.60	61.57
Final stock	956.40	25.43	231.7	14.17

Source: own calculations after [11].

Domestically, 1,290.20 thousand tons of sunflower seeds were used (34.31%) and a smaller amount of rapeseed - 396.5 thousand tons (24.25%). For both categories of oleaginous plants, the highest use was in industry, 99.45% for sunflower and 98.69% for rapeseed. Losses were approximately equal in both types of seeds.

CONCLUSIONS

Following the analysis of the exports and imports of rapeseed and sunflower seeds for the period 2018-2022, the following conclusions were drawn:

- Benefiting from favourable conditions for the cultivation of oleaginous plants, Romania was the most important exporter of sunflower seeds, in terms of quantity and value, worldwide in the period 2018 – 2021. In 2022, this position was held by Ukraine;

- 2019 was the year in which Romania exported the largest amount of sunflower seeds - 2,104,662 tons;
- in the value exports category, the highest value was recorded in 2022 - 1,166,091 thousand dollars;
- Rapeseed exports placed Romania in 5th place due to the quantity and respectively 6th, due to the exported value;
- Romania exported the largest amount of rapeseed in 2018 - 1,320,200 tons;
- The highest value of rapeseed exports was obtained in 2022 - \$734,524 thousand;
- In 2022, Romania doubled the value of sunflower seeds imports (\$538,098 thousand) compared to 2021 and ranked 4th in the list of world importers; it also occupied the 4th place due to the imported quantity, of 634,098 tons;
- Compared to 2021, in 2022 the quantitative and value imports of rapeseed doubled, which led to Romania entering the top 12 importers in these categories.

Romania has agricultural potential both for sunflower and rapeseed cultivation, because, despite the fact that in 2022 sunflower crop occupied only 14% and rapeseed 6% of the total cultivated area and there were also problems related to drought in certain development regions, our country occupied 3rd place for the sunflower production and 4th for the rapeseed production obtained at the level of the European Union. The lack of processing units placed us, in the same year, among the first exporters of sunflower and rape seeds. By developing precision agriculture and especially irrigation systems, in order to be able to withstand climate changes, Romania will be able to continue to be an important producer of oleaginous plants, which will strengthen its status as an important player on the market in the future.

At the same time, the increase in the number of processing units will lead to an increase in exports of products from processed oilseeds.

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