

## Romania's position in the sheep and goat meat trade

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### Abstract

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Romania is a major sheep and goat breeding country in Eastern Europe and has trading partners for live animals and sheep and goat meat trade, both inside and outside the EU (e.g., in the Balkans, Middle East and Asia). The paper presents the quantity and value of the world's largest live sheep and goat and their meat importers and exporters for the period 2018–2022. At the same time, Romania's main partners and its position on the sheep and goat meat market are highlighted. The methodology used included a statistical analysis of trade quantities and values based on the International Trade Center data series. The results of the study show that Romania developed well in terms of value exports of live sheep and goats, becoming number one in the world during the study period. Romania also ranked 27<sup>th</sup> in the category of fresh, chilled or frozen sheep or goat meat exports by value.

*Keywords:* exports; imports; Romania; sheep and goats; trade

### Introduction

Romanians have been raising animals, and sheep in particular, for centuries (Soare E., 2016), thus exploiting the natural resources of the Carpathian space, namely large surfaces of pastures and meadows (Popescu A., 2017). This activity is practiced especially in the mountainous area (Chiurciu I.A. et al., 2023), where 73.16% of the total of 10,247,383 sheep and 47.28% of the total of 1,483,161 goats existing in Romania in 2022, can be found (INS, 2023).

A peculiarity of this occupation is the fact that sheep breeders are mainly elderly farmers, who generally obtain low incomes from the production activity, due to low productivity and are dependent on subsidies (Grodea M., 2018).

Despite these aspects, Romania was on the leading positions in the EU due to its livestock, thus in 2022, it occupied the 2<sup>nd</sup> place, after Spain, in the ranking of goat breeders and the 3<sup>rd</sup> place in that of goat breeders, after Greece and Spain (Eurostat, 2023).

The main breeds of sheep raised in Romania are intended for the mixed production of milk, meat and wool. There are few native breeds for milk or meat production (Stanciu S., 2015).

The majority of sheep holdings (64.82%) are farms with up to 10 heads, followed by the category of 11–20 heads (14.03%) and farms with more than 500 sheep – 0.87% of the total number of farms sheep in the country. Most sheep fall into the “201–500 head” category (24.48%), followed by

the over 500 head category (20.27%), and the lowest share is found in the 11–20 head category (6.42%). The average size of the sheep farm, throughout the country, is 31.34 heads (Marin A. et al., 2021).

Romania is among the first sheep breeders in Europe, but meat (Observatornews.ro, 2018) and processed products are imported, which has led to an imbalance in the trade balance (Stanciu S. et al., 2015).

Important breeders, Romanians are not big consumers of sheep and goat meat, they only consume them around the Easter holidays or in the autumn. In Romania, sheep and goats are raised especially for milk (Maerescu C. M., et al., 2018).

But the Romanians also successfully use other products resulting from this secular activity and which have favored the development of the food “industry” and that of processing wool, hides and furs (Chiurciu I.A. et al., 2023). Taking these aspects into account, the work aims to highlight Romania’s exports and imports of live animals from the category of sheep and goats and of fresh, chilled or frozen sheep or goat meat.

## Material and Methods

The world trade in sheep and goats – live animals, as well as meat from these categories of animals was analyzed in terms of quantities and values, highlighting the main importers and exporters. The position occupied by Romania in this ranking was identified and its main partners were highlighted. The study period is 2018–2022.

The bibliographic method was used. The analyzed indicators, which were processed on the basis of statistical data obtained from the website of the International Trade Center (ITC), were:

- the weight and the values of live animals exported by Romania and imported by its main partners,
- the quantities and the values of sheep and goat meat exported by Romania and imported by the main partners.

Statistical data were processed and then represented graphically or in tables.

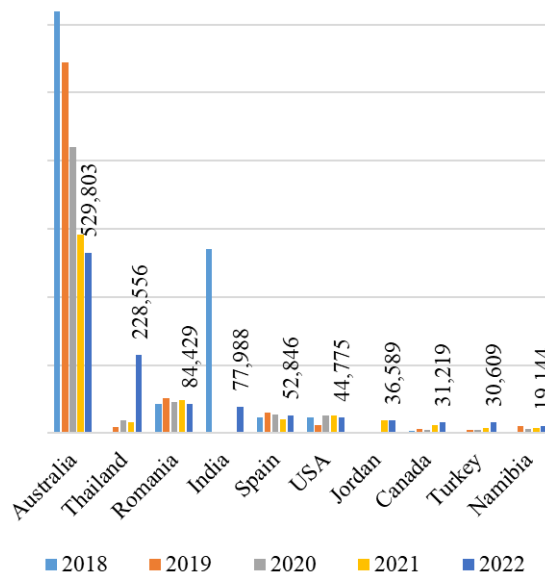
## Results and Discussion

The analysis of global quantitative exports of “Live sheep and goats”, for the period 2018–2022, presented in Figure 1, indicates that the first place was occupied by Australia, which in 2022 amounted to a quantity of 529,803 tons.

In 2<sup>nd</sup> place was Thailand, and Romania was in the 3<sup>rd</sup> position, with a weight of exported animals of 84,429 tons at the level of 2022. Romania’s quantitative exports decreased

by 1.79% in the analyzed period. In the top 10 there was another EU state, Spain, in the 5<sup>th</sup> position, with 52,846 tons.

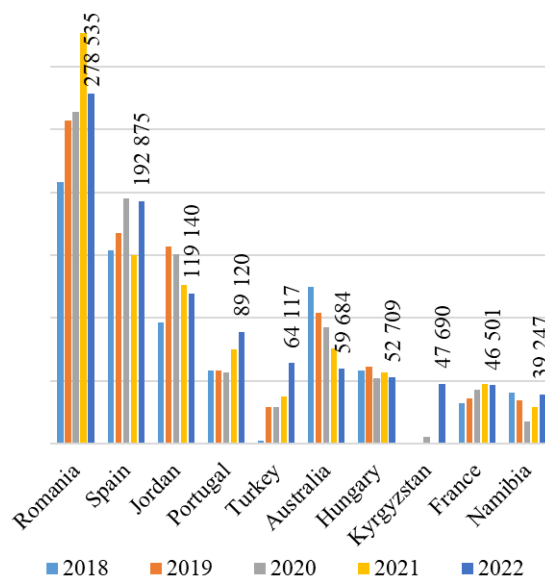
In terms of global value exports of „Live sheep and goats”, the ranking has changed, and the first 2 places were



**Fig. 1. Worldwide exporters\* for “Live sheep and goats”, tons**

\*Reporting to the year 2022

Source: our representation after ITC, 2023



**Fig. 2. Worldwide exporters\* for “Live sheep and goats”, 1,000 \$**

\*Reporting to the year 2022

Source: our representation after ITC, 2023

**Table 1. The main countries that import “Live sheep and goats” from Romania**

Year 2022		
Importers	tons	1,000 \$
Jordan	34,537	117,025
Saudi Arabia	25,167	80,686
Greece	12,095	37,089
Italy	4,875	17,335
Bulgaria	2,351	8,198
Croatia	1,616	5,276
Albania	744	2,216
Bosnia and Herzegovina	718	1,888
Israel	712	3,403
Libya	422	1,378

Source: ITC, 2023

occupied by Romania (\$ 278,535 thousand) and Spain (\$ 192,875 thousand) in 2022 – Figure 2. Australia was only on the 6th position, with \$ 59,684 thousand.

Romania's “Live sheep and goats” value exports increased by 8.43% in 2022 compared to 2018.

The number of live sheep represented in 2022 94% of the total animals exported to countries outside the EU (Gherasim C., 2023).

Romania's commercial partners in the “Live sheep and goats” category, in 2022, are presented in Table 1.

The first 2 places were occupied by Arab states, Jordan and Saudi Arabia, followed by partners from the European continent, at which Israel and Libya joined.

Romania continues to export live animals, although studies have shown that it loses 50 million euros annually and many countries have given up this type of trade. If they exported processed meat, 5000 new jobs would be created in Romania (Gherasim C., 2023).

In order to be able to continue exporting live animals, Romania must comply with animal welfare standards, especially in the distribution and transport chain (Financial Intelligence, 2021).

Table 2 shows the quantitative exports of „Meat of sheep or goats, fresh, chilled or frozen” worldwide. It should be noted that this is the category in which sheep or goat meat is classified according to the ITC. And in this category, Australia was in first place, with a slight increase in exports of 0.37% in the analyzed period, which represented approximately 1/3 of the total quantitative world exports.

The next places were occupied by New Zealand and the UK. Among the first 10 exporters were also 3 EU member states, Ireland, Spain and France, which occupied, in order, the 4th, 5th and 6th places.

Romania was not among the most important world exporters of “Meat of sheep or goats, fresh, chilled or frozen”. As can be seen in Table 1, it was in the 26<sup>th</sup> position, and in 2022 the exported quantities decreased by 77.35% compared to 2018.

Value exports for the same analyzed product category, presented in Table 3, increased mainly for the countries in the top 10, with the exception of Belgium and Ethiopia. As in the category of quantitative exports, the first places in the ranking of exporters of “Meat of sheep or goats, fresh, chilled or frozen” in terms of value, were occupied by Australia, New Zealand, the UK and Ireland.

Romania has dropped another position in this ranking, compared to quantitative exports, ranking 27<sup>th</sup> and recording a decrease of approximately 70% in export values from 2022 compared to 2018.

Romania's commercial partners in the “Meat of sheep or goats, fresh, chilled or frozen” category, in 2022, are presented in Table 4.

**Table 2. Worldwide exporters\* for “Meat of sheep or goats, fresh, chilled or frozen”, tons**

Position	Exporters	2018	2019	2020	2021	2022	2022/2018, %
1	Australia	501,809	530,035	462,260	484,202	503,657	100.37
2	New Zealand	426,119	407,425	418,108	412,016	397,405	93.26
3	UK	81,504	-	88,272	70,135	74,236	91.08
4	Ireland	52,998	54,186	56,705	50,127	55,971	105.61
5	Spain	41,880	45,017	43,170	52,998	48,500	115.81
6	France	11,201	10,699	9,039	39,600	42,853	382.58
7	Netherlands	24,858	25,950	24,134	22,273	27,509	110.66
8	Kenya	6,375	9,705	12,508	15,388	19,217	301.44
9	Uruguay	12,806	12,962	14,344	21,977	17,536	136.94
10	Ethiopia	15,878	13,228	11,308	16,215	14,447	90.99
...	...						
26	Romania	9,806	9,788	4,338	2,972	2,221	22.65

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

**Table 3. Worldwide exporters\* for “Meat of sheep or goats, fresh, chilled or frozen”, 1,000 \$**

Position	Exporters	2018	2019	2020	2021	2022	2022/2018, %
1	Australia	2,856,063	3,079,286	2,722,791	3,391,830	3,550,501	124.31
2	New Zealand	2,639,959	2,572,566	2,537,831	2,903,195	2,773,166	105.05
3	UK	490,670	510,311	562,357	604,426	603,808	123.06
4	Ireland	359,609	340,669	390,771	439,156	450,064	125.15
5	France	82,253	76,263	64,478	351,692	356,516	433.44
6	Spain	212,330	216,196	223,615	333,086	316,818	149.21
7	Netherlands	234,335	214,263	197,710	229,477	300,818	128.37
8	Belgium	130,861	111,255	93,115	104,163	129,456	98.93
9	Uruguay	71,517	73,148	73,076	124,234	99,242	138.77
10	Ethiopia	89,281	72,523	64,105	90,519	88,358	98.97
...	...						
27	Romania	44,412	44,319	22,711	17,986	13,364	30.09

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

**Table 4. The main countries that import “Meat of sheep or goats, fresh, chilled or frozen” from Romania**

Year 2022		
Importers	1,000 \$	tons
Italy	7,594	1,279
Croatia	871	120
Jordan	731	83
Kuwait	728	109
UK	616	111
Sweden	456	68
Bahrain	368	94
Oman	331	73
Germany	256	36

Source: ITC, 2023

The first 2 places were occupied by EU states, followed by Jordan and Kuwait, and other partners from the European continent, at Arab states. With the exception of Italy, the imports of the other countries were around 100 tons and less.

The available data on the quantitative imports of “Live sheep and goats” showed that South Africa, Uzbekistan and Thailand ranked in the first 3 places worldwide (Table 5). Although the main importer registered a decrease for the period 2018–2022, the states in the 2<sup>nd</sup> and 3<sup>rd</sup> places had increases. The other importers in the top 10 came from Asia, and Italy was in 8<sup>th</sup> place. Iraq had the largest increase in the amount of imported meat, while the other countries had decreases in imports in 2022 compared to 2018.

Romania was not in the leading positions in the categories of quantitative (Table 5) and value (Table 7) imports of “Live sheep and goats”, occupying position 41

**Table 5. Worldwide importers\* for “Live sheep and goats”, tons**

Position	Importers	2018	2019	2020	2021	2022	2022/2018 %
1	South Africa	613,635	643,925	307,630	392,275	593,840	96.77
2	Uzbekistan	26,097	258,329	39,983	130,977	314,655	1,205.71
3	Thailand	57,544	39,363	29,344	55,753	268,779	467.08
4	Lao	-	485	1,159	2,168	223,624	-
5	Saudi Arabia	179,884	193,541	130,288	92,291	60,446	33.60
6	Israel	-	748,720	20,013	24,419	33,451	-
7	Malaysia	60,303	51,969	37,361	39,062	22,105	36.66
8	Italy	27,375	22,156	22,688	14,455	21,541	78.69
9	Qatar	31,551	32,882	27,253	18,593	19,816	62.81
10	Iraq	4	-	-	3,330	18,548	463,700.00
...	...						
41	Romania	2,518	1,784	768	1,066	729	28.95

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

**Table 6. The main countries from which Romania imports “Live sheep and goats”**

Year 2022		
Exporters	1,000 \$	tons
Hungary	689	240
France	454	74
Slovakia	365	156
Croatia	271	151
Spain	239	62
Italy	120	47

Source: ITC, 2023

and 38, respectively, being known to be an important exporter. In the analyzed period, there were decreases of approximately 70% in both categories, and the imports consisted of purebred animals, for reproduction and less for consumption.

**Table 7. Worldwide Importers\* For “Live sheep and goats”, 1,000 \$**

Position	Importers	2018	2019	2020	2021	2022	2022/2018, %
1	Saudi Arabia	585,458	633,731	435,858	494,001	205,721	35.14
2	Jordan	78,704	81,976	184,384	203,728	192,535	244.63
3	Qatar	143,681	140,363	132,405	117,640	144,162	100.33
4	Israel	66,294	57,251	61,038	89,493	122,979	185.51
5	Italy	73,731	60,410	64,308	59,949	79,482	107.80
6	Kuwait	112,701	166,322	197,914	176,138	57,972	51.44
7	Uzbekistan	2,431	22,179	5,731	20,478	50,983	2,097.20
8	Ireland	48,438	41,171	44,330	48,938	46,950	96.93
9	South Africa	40,502	33,560	16,760	28,504	39,899	98.51
10	Iraq	11	369	1,285	6,370	34,439	313,081.82
...	...						
38	Romania	7,499	5,065	2,002	3,111	2,138	28.51

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

**Table 8. Worldwide importers\* for “Meat of sheep or goats, fresh, chilled or frozen”, tons**

Position	Importers	2018	2019	2020	2021	2022	2022/2018, %
1	China	319,036	392,319	364,868	410,602	357,884	112.18
2	Sri Lanka	-	1,214	1,067	881	353,070	-
3	USA	124,874	127,124	132,943	166,137	164,895	132.05
4	France	88,867	88,829	80,547	106,233	115,196	129.63
5	UAE	61,195	59,615	53,788	54,833	56,755	92.74
6	UK	77,905	63,060	59,287	47,247	55,685	71.48
7	Malaysia	36,301	31,346	37,806	29,361	43,228	119.08
8	Germany	45,801	43,325	48,202	33,132	38,792	84.70
9	Saudi Arabia	34,838	23,863	20,327	14,792	31,854	91.43
10	Canada	21,151	22,907	23,480	24,522	30,529	144.34
...	...						
42	Romania	687	591	594	914	2,357	343.09

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

Table 6 shows the states from which Romania imported “Live sheep and goats” in 2022. They are EU countries, the highest values and quantities being found for Hungary.

Saudi Arabia had the highest values of imports for the “Live sheep and goats” category (Table 7), followed by Jordan and Qatar. The EU states Italy and Ireland were placed 5<sup>th</sup> and 8<sup>th</sup>, respectively.

It is noted that Saudi Arabia, Kuwait, Ireland and South Africa recorded decreases in import values, and, again, Iraq – the biggest increase.

Table 8 shows the quantitative imports of sheep and goat meat and it is noted that China was the largest importer. A spectacular increase in imported quantities in 2022 placed Sri Lanka in 2<sup>nd</sup> place, 3<sup>rd</sup> place being occupied by the USA.

Two EU member states, France and Germany, whose inhabitants include this type of meat in their daily diet, also entered the top 10.

**Table 9. Worldwide importers\* for “Meat of sheep or goats, fresh, chilled or frozen”, 1,000 \$**

Position	Importers	2018	2019	2020	2021	2022	2022/2018, %
1	China	1,309,067	1,861,468	1,743,764	2,376,891	2,076,225	158.60
2	USA	1,032,717	1,149,388	1,010,669	1,435,942	1,674,802	162.17
3	France	577,153	530,867	532,294	894,447	925,582	160.37
4	UK	499,657	399,912	406,806	362,111	430,930	86.25
5	Germany	481,626	394,110	429,624	342,185	430,026	89.29
6	UAE	386,076	383,066	359,254	383,912	377,230	97.71
7	Malaysia	181,736	164,039	209,221	185,366	291,335	160.31
8	Canada	169,141	180,156	183,408	212,943	282,898	167.26
9	Netherlands	274,003	247,124	219,479	191,479	281,894	102.88
10	Korea	138,621	134,801	142,526	187,856	272,648	196.69
...	...						
45	Romania	4,459	3,899	3,439	6,589	10,731	240.66

\*Reporting to the year 2022

Source: our calculation after ITC, 2023

UAE, UK, Germany and Saudi Arabia are the countries whose quantitative imports decreased during the analyzed period.

It is known that Romanians are not big consumers of sheep and goat meat and this is also reflected in the position occupied in the ranking of meat importers in this category.

Despite occupying the 42<sup>nd</sup> place, Romania's imports increased spectacularly in 2022 compared to 2021, which reflects an increase in Romanians' preferences for sheep and goat meat.

In the top of the quantitative importers of “Meat of sheep or goats, fresh, chilled or frozen” there were mainly the same countries, as in Table 8, but the Netherlands and Korea also entered this top. China still occupied the first place, followed by the USA and France.

Again the UK, Germany and the UAE recorded declines.

**Table 10. The main countries from which Romania imports “Meat of sheep or goats, fresh, chilled or frozen”**

Year 2022		
Exporters	1,000 \$	tons
Greece	3,435	877
Netherlands	1,714	535
UK	1,132	114
Spain	1,072	263
Germany	809	221
Belgium	775	53
Ireland	491	36
Hungary	334	54
Bulgaria	222	35

Source: ITC, 2023

Entering the top 10 in the 10<sup>th</sup> position, Korea had the biggest increase (196.69%).

Ranked 45<sup>th</sup>, in the ranking of the states that had the highest values of sheep and goat meat imports, Romania recorded growth leaps in 2021 and 2022. The states from which it imported these categories of meat can be found in Table 10.

Romania's main trading partners were, in order, Greece, Netherlands, UK and Spain, from where Romania imported meat worth over \$ 1,000,000.

In addition to the economic effect, the continuation of the tradition related to sheep breeding and even raising sheep and goat herds is particularly important for villages and pastoral traditions, which otherwise risk being lost over time, and for maintaining the biodiversity of permanent mountain meadows, because the reduction in the number of animals has a major impact on the quality of pastures and hay (Csizmadia A.Ş. et al., 2022).

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### Conclusions

- in terms of “Live sheep and goats” exports, Romania was in 3<sup>rd</sup> place due to the quantity of live animals and in first place due to the recorded values,



- in the “Meat of sheep or goats, fresh, chilled or frozen” export category, Romania did not occupy a leading place, ranking 26<sup>th</sup> in terms of quantity and 27<sup>th</sup> in terms of value,
- having a large herd of animals, Romania is not a dedicated importer of “Live sheep and goats”, the quantitative and value imports decreasing in the analyzed period,
- at the same time, the preferences of Romanians for “Meat of sheep or goats, fresh, chilled or frozen”, increased and despite the fact that it occupied the 42<sup>nd</sup> place in terms of quantity and 45<sup>th</sup> in terms of value, imports increased during the analyzed period,
- Romania's export partners were mainly Arab and EU countries,
- for imports in the analyzed categories, Romania chose the EU countries.

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