SHEEP AND GOAT BREEDING IN ROMANIA - BETWEEN TRADITION AND CONSUMPTION

Irina-Adriana CHIURCIU, Iuliana ZAHARIA, Gina FÎNTÎNERU, Toma Adrian DINU, Elena SOARE

University of Agronomic Sciences and Veterinary Medicine Bucharest of Bucharest, Faculty of Managementand Rural Development,59 Marasti Boulevard, District 1, 011464, Bucharest, Romania, Emails:chiurciu.irina@managusamv.ro, zaharia.iulia@managusamv.ro,gina.fintineru@usamv.ro,tomadinu@managusamv.ro, soare.elena@managusamv.ro

Corresponding author: zaharia.iulia@managusamv.ro

Abstract

The paper highlights the activity of raising sheep and goats in Romania, and the consumption of meat from these categories of animals, in the period 2015-2021, while also sketching the autochthonous ethnographic framework where the economic activity is placed - the tradition records millennial pastoral aspects that are still preserved more or less formally with deep echo in Romanian popular spirituality, reflected in popular beliefs, traditions, customs, folklore. The paper analysed specific indicators of the sheep and goat breeding sector, such as: quantitative fluctuations of the number of sheep and goats; the sheep meat production obtained in slaughter houses; the number of sheep slaughtered in slaughterhouses; the price for sheep meat "per 100 kg live weight" and the average annual consumption, per inhabitant, of sheep and goat meat. The statistical sources for our data are the National Institute of Statistic and Eurostat, as well as other specialized materials. Statistical data showed that in Romania in 2021 there were over 10,000,000 sheep and approximately 1,500,000 goats.

Key words: sheep, goat, herds, meat, price, consumption, Romania

INTRODUCTION

Raising animals on the pastures and hayfields generously offered by the Carpathian-Danubian-Pontic area is an ancient, traditional occupation of the (pre)Romanians, which created a cultural complex tailored temporally and locally according to the specific features of the historical eras successively reunited in about 10 millennia of European civilization initially dominated by the Neolithic Mother Goddess (8000 -2500 B.C.), later by the Indo-European Father God (2500 B.C. - 0), then massively imprinted by Christianity. Ghinoiu records that the shepherds possessed knowledge (in meteorology, remarkable astronomy, folk medicine) as a sine qua non condition for survival in social groups of 15-20 individuals separated for a long time from the community of belonging and permanently subject to risks (extremes weather conditions, wild animals, initiation of routes, etc.)[8].

The millennial transhumant shepherding, with its Romanian peak in the mid-19th century

and on the way to extinction in the first half of the 20th century [8], drove huge flocks of sheep in search of pastures on European geographical coordinates much larger compared to the territories inhabited by the Thracians; for the pastoral summer, the flocks were led to mountainous regions (in the Carpathians, the Dinaric Alps, the Rhodope Mountains, the Pindus, the Caucasus), while the wintering took place in plain or steppe areas (the coastal plains of the Black, Caspian, Adriatic, Ionian and Aegean Seas, in the Ponto-Caspian steppes, up to the Crimea and the northern Caucasus). It is considered that in the Middle Ages European transhumance was practiced on a large scale, from the Balkans, through Italy and France, to Spain and Portugal [8], that is why the magnitude of transhumance led us to compare it with the Silk Road as far as its impact on creating links (the initiation of communication roads and, later, the transformation of some of them into major communication routes), on intra- and transcultural civilizational exchanges, the rural development being one of its consequences.

The Romanian rural space of our days still preserves, through household practices, in the mentality of the elderly villagers, in the economic activity of the younger generations able to run a business exploiting the local material and spiritual resources (through a farm, or through an agro-tourism guesthouse, or through trade with local products, agrotouristic routes like the Wine route, etc.) traces of what was once a pastoral civilization. And the vocabulary of the current Romanian preserves language many expressions originating in the countryside, proof for a keen spirit of observation and a sharp tongue that the Romanian did not lack. To exemplify this aspect, some common expressions in the Romanian vocabulary up to nowadays are: the goat jumps the table and the billy goat jumps the house (in Romanian: capra sare masa, iada sare casa) with the meaning that the offspring surpass their parents, especially in negative aspects; to reconcile both the goat and the cabbage (in Romanian:a împăca și capra, si varza) with the meaning of reconciling divergent interests; he (the wolf) took off his sheep's clothing (in Romanian: sa dezbrăcat (lupul) de pielea oii) marks the moment when a person pretending to be gentle and harmless shows his aggressive, dangerous side; to take (or remove) two skins from one sheep (in Romanian: a umbla să iei (sau să scoți) două piei de pe o oaie) means to exploit a resource mercilessly, abusively.

Over time, pastoralism represented a significant aspect of agriculture in our country, because it contributed, on the one hand, to ensuring food security, and on the other hand, to the continuation of life on the mioritic plains [5, 26].

Regarding the sheep raised nationally until the second half of the 19th century, it was noted that they were belated, rustic breeds and types. However, they were distinguished by an increased degree of adaptability to the temperate continental climate. We must also remember the fact that these rustic breeds were very resistant to diseases. Among these, the most well-known are: the Țurcană breed, a variety of Stogoșa populations, but also a smaller herd of Țigaie [4].

We can affirm that the activity of raising sheep and goats in our country was and will remain a specific and traditional activity for certain regions because the diversity of the productions obtained, the low energy consumption, together with the specificity of the fodder that these animals prefer, confer a sustainable nature of this occupation [21].

During the analyzed period, the sheep and goat herds evolved differently from one year to the next, with the highest number of sheep recorded in 2019 (10,358,699) and goats in 2020 (1,611,785).

In 2019, the provided data ranked Romania in the 3rd position regarding sheep and goat breeders across the European Union, while the density of animals per hectare was three times more reduced [19].

In 2021, according to the official Eurostat data, Romania ranked the 2nd position in the top of the sheep breeders (it had 17% of the existing flock at the level of the European Union), after Spain, which had a flock of 15,081,350 heads (held 25% of the existing herd at the level of the European Union), and in 3rd place in terms of goats herds, after Greece (3,135,100) and Spain (2,589,760) [2]. Taking into account the local premises, the purpose of the paper is to investigate some aspects related to traditions in the field of raising sheep and goats and on the national consumption of meat. In order to capture both aspects specified previously, the paper analyzed relevant economic indicators for the sheep and goats raising and commercialization sectors, simultaneously with highlights from the millenary reservoir oftraditions, customs, popular beliefs with a still active and partially explanatory role contemporaryRomanian within the countryside.

MATERIALS AND METHODS

autochthonous In order to create the ethnographic framework where the economic activity is placed, we used as methods the reading (with multiple directions of investigation various and sources of

information, keeping a reference work as the main resource) and its processing by structuring and analysis according to certain coordinates relative to the pastoral specificity: the calendar of the pastoral year, the traditional pastoral activities with their related atmosphere, rituals and symbolism, aspects related to the domestic industry through which the sheep products are valued and other aspects reflected in the Romanian popular mentality as a result of these ancestral occupations in which the human being lived in close connection with nature and developed successful direct activities (not mediated by technology) for living within community.

In order to analyse the sheep and goat breeding sector, the following indicators were analysed for the period 2015-2021: sheep and goat herds at national level and by development regions; the number of heads and the production of slaughtered sheep meat, the price (for 100 kg of live meat) and the average annual consumption per capita. The data were retrieved from National Institute of Statistics and Eurostat, and in order to highlight the results as best as possible, they were interpreted and presented in graphic form.

RESULTS AND DISCUSSIONS

In Romania, the pastoral year brings together symmetrical seasons (summer and two winter), which are mutually delimited temporally by Christian feast dates (after the Christianization of the Romanians), four calendar dates being the benchmarks for planning the entire activity of animal especially for sheepmen: breeders, the beginning of the pastoral summer on April 23 (St. George, the same as Sângeorz), the midsummer on July 20 (St. Elijah), the end of the summer when the pastoral winter opens, on October 26 (St. Dumitru), with the pastoral midwinter on the night of 15-16 January (St. Peter of the Wolves).

In the pastoral summer, the sheep were taken to the mountains, their milk and wool were collected and used, and they were fed to optimally enter the breeding and wintering season. The typical activities of the annual pastoral cycle are the following:

• Sâmbra oilor (or, depending on the area, Ariețul, Ruptul Sterpelor, Măsurișul oilor), on Sângeorz or on another day at the end of April, represents the first milking of the flock of sheep (as an indicator of their productivity, which will correlate in late summer or early autumn, when the flock is disintegrated, with the amount of products distributed by the shepherd to each sheep owner, accompanied by rituals to protect the fold and the shepherds from evil forces, followed by a country party with a rich meal ("balmos, [...] the roast lamb, ring biscuits, cottage cheese from the first milking" [8]), songs and games with pastoral theme;

• *sheep and rams are/were sheared in the village* in the same period (between Sângeorz and Arminden);

• *the flock goes up to the mountain* where, for economic reasons, the shepherds keep the sheep separately from the rams;

• *shearing of the lambs* (July 20, St. Elijah) - for this purpose their owners go up to the flock. The same day is also an occasion for a long-awaited reunion between the shepherds and their wives/fiancées.

• *the descent of the sheep* (between August 1-15, Sf. Mary): the shepherds brought the flock to the village, each peasant recovered his sheep, received the related dairy products, paid the shepherds and then, despite the altercations that still arose at the "closing of accounts ", at the end they partied together with the whole community.

Today we have ethno-culinary festivals such as *Răvăşituloilor* from Bran, Braşov, where producers and other merchants exhibit and sell traditional products (sheep pastrami, cheese specialities, etc.), and consumers taste and party with music and cheerfulness.

The wedding the sheep of (in Romanian: Nuntaoilor or similar names as Năpustitulberbecilor (arietilor) or *Mârlituloilor*, between October 14. St. Parascheva - November 8, St. Mihail and Gavriil) refers to the pairing of sheep and goats. After the pairing at the beginning of the pastoral winter it follows the gestation (cca.21

weeks long), so the lambs and kids are born in fairly old method practiced by shepherds. March and weaned late in April. Currently, in our country, transhumance can Romania is a country where the raising of be recommended, as an efficient method of sheep and goats works well as it has the raising sheep[7]. proper geographical position and all the In time, the quantity of domestic sheep and landforms: mountains, hills, plains; these goats in Romania varied, determined by include a big amount of pastures that permit internal and external factors. We note the the phenomenon of transhumance [24]. increase of the number of sheep in 2021 by An important peculiarity of raising sheep is 2.83% compared to year 2015 and, for the the fact that their exploitation is not closely same period of time, also the number of goats related to the existence of the land related to increased by 3,64%.

- Figure 1.

Number	12,000,000	9,809,512	9,875,483	9,981,859	10,176,400	10,358,699	10,281,473	10,087,439
	10,000,000 8,000,000 6,000,000 4,000,000	1.440.151	1,483,146	1,503,270	1,539,317	1,594,862	1,611,785	1.492.544
	2,000,000 0			•	•			
		2015	2016	2017 •Sheep	2018 Goats	2019	2020	2021

Fig. 1. Dynamics of sheep and goat herds in Romania, in the period 2015-2021 Source: our design after [10].

In 2021, the Centre Region had the largest herd of sheep, 2,260,165 (representing 22.41% of the total), and was followed by the North-West Region - 1,821,136 and the South-East Region with 1,565,386 heads -Figure 2. Apart from the Bucharest-Ilfov Region, in the South Region -West Oltenia grew the fewest specimens (626,121). In the period 2015-2021, sheep flocks evolved

the production of bulk fodder. Sheep food can

be provided through transhumance. This is a

differently at country level. Thus, we recorded increases in the Regions North-West -10.43%, West - 4.40%, South-Muntenia -3.94%, South-East - 3.77% and in the Centre Region - 2.00%. The other Regions recorded decreases, as follows: Bucharest - Ilfov -60.60%, South-West Oltenia - 7.82% and North-East - 1.74%.



Fig. 2. Dynamics of sheep flocks in the development Regions of Romania, in the period 2015-2021 Source: our design after [10].

In 2021, the South-East Region had the largest herd of goats (379,491 - representing 25.43% of the total), followed by the South-West Oltenia Region - 287,872 and the South-Muntenia Region with 267,234 heads - Figure 3. The Bucharest-Ilfov Region had a number of 4,305 heads. In the period 2015-2021, both increases and decreases of goat herds were recorded in the Development Regions. Thus,

the increases were found in the West -10.33%, North-East - 6.58%, South-WestOltenia - 6.50%, North-West - 4.54%, South-Muntenia - 4.03% and South-East -3.18% Regions. In the other Regions, the number of goats decreased, as follows: Centre Region - 4.21% and Bucharest - Ilfov -60.60%.



Fig. 3. The dynamics of goat herds in the development Regions of Romania, in the period 2015-2021 Source: our design after [10].

As can be seen from Figure 4, the number of sheep slaughtered in slaughterhouses in our country decreased by 46.61% in 2021 compared to 2015. The drastic decrease occurred after 2019, with the emergence of the Covid 19 Pandemic. In 2018 Romania slaughtered the most sheep, 814.82 thousand heads.



Fig. 4. The number of sheep slaughtered in slaughterhouses in Romania, in the period 2015-2021 Source: our design after [6].

The direct consequence of this decrease in number of the sheep is the decrease of the production of meat from these animals, also noted in Figure 5. The decrease was of 29.86% in 2021 compared to 2015. The largest amount of sheep meat was obtained in 2018 - 11.97 thousand tons, corresponding to the large number of slaughtered heads.



Fig. 5 Sheep meat production obtained in slaughterhouses in Romania, in the period 2015-2021 Source: our design after [6].

Regarding the price for sheep meat "per 100 kg live weight" with small fluctuations, here we can record an increase - 157.76% in 2021 compared to 2015. The year 2018, with the highest production of slaughtered meat, recorded the lowest sheep meat price - 390.00

 PKINT ISSIN 2284-7995, E-ISSIN 2285-5952

 1. :/!!100111:

lei/"100 kg live weight", the highest being in 2021 - 620.00 lei/"100 kg live weight" (Figure 6).



Fig. 6 Price for sheep meat "per 100 kg live weight", in Romania, in the period 2015-2021 Source: our design after [6].

Rituals: In the traditional rural environment, practical activities were accompanied by pre-Christian ritual acts with protective role for the community's members and their properties from evil forces. Ghinoiu[8]mentions a series of such practices through:

1. recourse to fire (lighting the Living Fire, smoking shepherds and sheep),

2. recourse to water (symbolic purification of sheep and/or their owners by sprinkling with holy water, bathing in clean, clear river water, washing with dew),

3. recourse to sound and logos (cries to ward off evil forces, magic formulas),

4. recourse to offering and/or sacrifice (ritual food, lamb sacrifice).

A reminiscence of the prehistoric zoomorphic goddess and the Saturnalia practiced by the Romans is the ritual called *Turca* (synonymous, depending on the ethnographic area, with *Capra* (The Goat), *Boura*, *Brezaia*), still celebrated in the New Year traditions.

Turca symbolically comes to life at the moment when it is objectified in the form of the animal mask (usually a goat mask) and lives only on the day between years, through the character who animates her - a boy who wears the mask (and the associated goat costume) and his fellows - on the streets of the village, in a group of noisy boys, who, through rhythmic folk songs, draw the community's attention on the coming of the

New Year (as a renewed time!), because the old year (the "trouble maker" *Turca*) is dying to make way for the new year, respectively for new opportunities during a renewed time [8]. Currently, the custom is also being adopted in the city.

Lamb sacrifice also has millennial origins, both among Indo-Aryan peoples such as the Geto-Dacians (sacrificing lambs in the spring to mark the rebirth of nature through a feast with the meat of the domestic animal at hand that was born in the spring) and among the Jews and Muslims, in honour of the divinity.

The lamb also becomes one of the Christian religious symbols, because the prophets of the Old Testament had announced under this name God incarnated in man, and John the Baptist had said showing Jesus Christ to the Jewish people "Behold the Lamb of God", the one who died for the salvation of the world. And if the Jews Easter means celebrating, with lamb sacrifice, the transition from Egyptian slavery to freedom, for Christians Easter is the greatest celebration and means the transition from death to eternal life through the sacrifice and the redemptive resurrection of Christ.

Since ancient times, people have resorted to sacrifice and offering as solemn and supreme forms of addressing the divinity in order to obtain a blessing. In this sense, according to Văduva apud Parlog [23] notes that in some areas of Romania, the lamb is sacrificed after its ritual purification and the purification of the one who sacrificed the animal.



Fig. 7 Average annual consumption, per inhabitant, of sheep and goat meat (in fresh meat equivalent) - kg per capita

Source: our design after [11-17].

Faced with the innocence of the lamb, we can naturally ask: why the sacrifice? Because "the sacrifice of a living being is necessary for the perfection of any creation, as valuable actions with valuable and unfading outputs can be raised and secured only through a sacrifice", according toEliade apud Parlog [23].

average annual consumption The per inhabitant of sheep and goat meat registered variations during the analysed period. - Figure 7. From the statistical data presented, it can be easily observed that the lowest consumption was recorded in 2015 and 2018 (2.2 kg per capita). In the 2016-2017 period, it was of 2.3 kg per capita. In Romania, sheep and goat meat represented 3.5% of total meat consumption in 2016 and is a "must have" for national consumers, especially during the Easter period of the year [9]. Starting from 2019, we observe an upward trend in the consumption of mutton and goat meat, reaching a maximum in 2021 (2.7 kg per capita). The consumption of lamb meat at the level of the European Union, but also at national level, depends on a variety of market factors, and on certain social factors that are quite difficult to measure[25].

It is known that, in Romania, the consumption of sheep meat is seasonal, but the program "Alegeoaia/ Choose the sheep" has led to increase this consumption for Romanians[20]. Along with meat, the raw materials obtained from the breeding of sheep and goats (milk, derived from milk) favoured the development of the household food "industry", as well as of those of processing wool, hides, and furs.



Photo 1. Equipment from the complex of traditional wool processing facilities "La vâltori", dating from the mid-19th century (Brașov, Lisa) Source: [18].

Transmitted from generation to generation, traditional milk processing technologies and related culinary tools (such as cheese mold) have been preserved and are still being used, as well as the various technical installations for processing wool and wool products (see the complex "La vâltori" from Lisa/Brașov [18], dating from the mid-19th century– Photo 1).

The wool spinning, women's and girls' activity (Photo 2), was mainly held in organized sessions from mid-autumn to early March, in an atmosphere of song and jovial mood. The deadline for completing the spinning of wool (and hemp) was Maundy Thursday in Easter Lent.



Photo 2. Romanian spinning social soiree (şezătoare) after finishing agricultural work Source: [1].



Photo 3. Costume for the goat dance (*Turca* dance) Source: [3].

And the woollen fabrics, through their craftsmanship, ingenuity, the art of making them (in the collection of the Museum of the Romanian Peasant in Bucharest, all the weaving and ornamentation techniques of the carpets are documented[22]), have gone beyond the initial utilitarian goal, becoming a major element of great value in the architecture and aesthetics of the interior, both in noble and peasant houses, being recorded in the dowry sheets of the time and left as a family legacy (Photo 3).

According to MADR [21], nowadays, several representative objectives are pursued in the sheep breeding and marketing sector:

- boosting the association, especially in order to increase the young sheep for fattening;
- ensuring the internal market with mutton;
- increasing the average annual consumption of mutton per inhabitant;
- increase in sheep meat exports;
- obtaining higher incomes for the sheep breeders, through the commercialization of the goods production.

Currently, at the national level, the aim is to stimulate the sheep and goat raising sector, which ensures both constant income for producers and products for consumption together with maintaining and capitalizing the most representative traditions, thus so that future generations have access to some aspects related to the history and identity of the Romanian people.

On the identity side, last but not least, we end the results and discussions section by mentioning the Romanian folkloric jewel that is the *Miorita* ballad (*miorita* is affectionate diminutive for the word sheep). This text bears the mark of pastoral living in communion with nature and in the human community which, bringing together individuals with antagonistic traits (the hero has a strong and generous character, strongly contrasting with that of the other two protagonists who fall prey to envy and greed), sometimes fails to become human communion. The main character, a young skilled handsome shepherd, understands the temporal character of his worldly identity and his earthly stop and based on this awareness he finds the power to peacefully receive the Unknown. As the Unknown (particularly death) is not an option but always a part of a state of art, of a human being, of existence.

CONCLUSIONS

Starting with the tradition(s) in our lands regarding the raising of sheep and goats, the work presented millennial pastoral aspects that are still preserved more or less formally (the pastoral new year calendar, pastoral customs, the characteristics of transhumance roads) echoing in the Romanian popular spirituality reflected in practices, customs, rituals (the Easter lamb sacrifice, the Goat dance etc.) and folklore, the Miorita ballad being more than an epic thread and attitude in the face of death, its lyricism and drama (simple but deep, like a traditional peasant's mentality) rounding and beautifying, in an original, incredibly melodious and allegorical way, a Romanian human type that can even be a universal one.

In the period 2015-2021, the flocks of sheep and goats increased by 2.83%, respectively 3.64%. In 2021, the Romanian Central Region had the largest number of sheep, respectively 2,260,165 heads, while goats predominated in the Southeast Region with 379,491 heads.

The meat consumption, according Eurostat, showed for the analysed period that the number of sheep slaughtered in slaughterhouses decreased by 46.61%, and meat production by 29.86%.

Instead, the price for 100 kg of live weight increased from 393 lei in 2015 to 620 lei in 2021. Although Romanians are not big fans of sheep meat, an increase in average annual consumption was noted from 2.2 kg per capita in 2015 to 2.7 kg per capita in 2021.

We can conclude that the efforts to support the sheep and goat sector made by the competent institutions were not in vain.

AKNOWLEDGEMENTS

This work was supported by a grant of the University of Agronomic Sciences and Veterinary Medicine of Bucharest Project

Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 23, Issue 2, 2023

PRINT ISSN 2284-7995, E-ISSN 2285-3952

number 1060/15.06.2022, "Propuneri de măsuri strategice în agricultura din România în contextul instabilității geopolitice /Proposals for strategic measures in Romanian agriculture in the context of geopolitical instability", Acronym AgRoMaS, within IPC 2022; co-financier PRO-AGRO Federation.

REFERENCES

[1]Blog - Amintiri din VechiulRegat (Memories from the Old Kingdom), 2014, Sezatoare (Romanian spinning social soiree), http://vechiulregat.blogspot.com/2014/03/sezatoare.html, Accessed on 21.02.2023.

[2]CECCAR Business Magazine, 25-31 May 2022, No. 22, Breviar Statistic - Spania și România au cele mai mari efective de ovine din Uniunea Europeană (Statistical Briefing - Spain and Romania have the largest flocks of sheep in the European Union), https://www.ceccarbusinessmagazine.ro/spania-si-

romania-au-cele-mai-mari-efective-de-ovine-dinuniunea-europeana-a9609/, Accessed on10.02.2023.

[3]CrestinOrtodox.ro, 2016, Jocul caprei, obicei stravechi (The goat dance, ancient custom), https://www.crestinortodox.ro/datini-obiceiuri-

superstitii/jocul-caprei-obicei-stravechi-153912.html, Accessed on 21.02.2023.

[4]Doroftei, F., 2006, Contributii privind studiul performantelor productive ale populatiilor de ovine din partea de est a tarii luate in controlul oficial al productiei (Contributions regarding the study of the productive performance of the sheep populations in the eastern part of the country taken under official production control),Ph.D. Thesis, Iasi University of Life Sciences (IULS), Romania, https://iuls.ro/wp-content/uploads/2021/12/Rezumat_Doroftei_Fanica.pdf Accessed on 15.01.2023.

[5]Drăganescu, C., 2006, Producția ovinelor în România la răscrucea tranziției - dileme și strategii (Sheep production in Romania at the crossroads of transition - dilemmas and strategies), Analele IBNA, Vol. 22, 2006, 97-

111,https://ibna.ro/anale/Anale_22_2006%20pdf/Anale %20IBNA%2022_14%20%20Draganescu.pdf,

Accessed on 25.01.2023.

[6]Eurostat, 2023,Database, https://ec.europa.eu/eurostat/data/database, Accessed

on 12.03.2023. [7]Gazeta de agricultură (Agricultural gazette) Creșterea ovinelor în sistem gospodăresc în România

(Raising sheep in the household system in Romania), 2012,

https://www.gazetadeagricultura.info/animale/ovine-caprine/12648-cresterea-ovinelor-in-sistem-

gospodaresc-in-romania.html, Accessed on 13.03.2023. [8]Ghinoiu, I., Calendarul țăranului român. Zile și mituri (The Calendar of the Romanian peasant. Days and myths), Univers Enciclopedic Gold Publishing House, Bucharest, 2019, pp.19, 113, 345.

[9]Grodea, M., 2018, The sheep and goat farming sector in Romania -A new development perspective. Scientific Papers. Series "Management, Economic Engineering in Agriculture and rural development", Vol. 18(3), 151-158.

[10]INS/National Institute of Statistics, 2023, Tempo online, www.insse.ro, Accessed on 13.01.2023.

[11]INS/National Institute of Statistics, 2022, Bilanțuri alimentare în anul 2021 (Food balances in 2021), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2021.pdf,Accessed on 18.01.2023.

[12]INS/National Institute of Statistics, 2021, Bilanțuri alimentare în anul 2020 (Food balances in 2020), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2020.pdf, Accessed on 18.01.2023.

[13]INS/National Institute of Statistics, 2020, Bilanțuri alimentareînanul 2019 (Food balances in 2019),https://insse.ro/cms/sites/default/files/field/public atii/bilanturi_alimentare_in_anul_2019.pdf, Accessed on 18.01.2023.

[14]INS/National Institute of Statistics, 2019, Bilanţuri alimentare în anul 2018 (Food balances in 2018), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2018.pdf, Accessed on 18.01.2023.

[15]INS/National Institute of Statistics, 2018, Bilanțuri alimentare în anul 2017 (Food balances in 2017), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2017.pdf, Accessed on 18.01.2023.

[16]INS/National Institute of Statistics, 2017, Bilanţuri alimentare în anul 2016 (Food balances in 2016), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2016_0.pdf, Accessed on 18.01.2023.

[17]INS/National Institute of Statistics, 2016, Bilanțuri alimentare în anul 2015 (Food balances in 2015), https://insse.ro/cms/sites/default/files/field/publicatii/bil anturi_alimentare_in_anul_2015_0.pdf, Accessed on 18.01.2023.

[18]La vâltori - Lisa, BV, 2023, Ce pot vedea (what can i see), http://www.lavaltori.ro/ce-pot-vedea/, Accessed on 11.12.2022.

[19]Lefter, A., 2020, România, pe locul 3 în UE la creșterea ovinelor și caprinelor. 30% din producție este exportată (Romania, on the 3rd place in the EU in the breeding of sheep and goats. 30% of production is exported), in press: Agrointeligența, 26 May 2020,https://agrointel.ro/144243/romania-pe-locul-3-in-ue-la-cresterea-ovinelor-si-caprinelor-30-din-productie-este-exportata/, Accessed on 18.01.2023.

[20]Maerescu, C.M., Țuțui, D., Chereji, A.I., 2018, Evolutions and perspectives concerning the production and consumption of sheep meat in Romania. From a declining industry to a rising star. Annals of the University of Oradea, Fascicle: Ecotoxicology, Animal

Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 23, Issue 2, 2023

PRINT ISSN 2284-7995, E-ISSN 2285-3952

Husbandry and Food Science and Technology, Vol. XVII/A 2018, 87-94,

https://protmed.uoradea.ro/facultate/publicatii/ecotox_z ooteh_ind_alim/2018A/Animal/Maerescu_2018.pdf.

[21]MADR/Ministerul Agriculturii și Dezvoltării Rurale ((Ministry of Agriculture and Rural

Development), 2023, Ovine si caprine (Sheep and goats), https://www.madr.ro/cresterea-animalelor/ovine-si-caprine.html, Accessed on 23.02.2023.

[22]Muzeul Național al Țăranului Român (The National Museum of the Romanian Peasant), 2023, Colecția Scoarțe, (The Wool Homespun), https://muzeultaranuluiroman.ro/colectia-scoarte/, Accessed on 10.12.2022.

[23]Parlog, N., 2014, De ce tăiem mielul de Paști? (Why do we slaughter the Easter lamb?),https://www.descopera.ro/maratoanele-

descopera/paste-2015-traditii-si-obiceiuri/12483607-

de-ce-taiem-mielul-de-pasti, Accessed on 10.12.2022.

[24]Popescu, A., 2017, Analysis of sheep and goats livestock and milk and meat production in Romania, 2007-2016. Scientific Papers. Series "Management, Economic Engineering in Agriculture and rural development", Vol. 17(4), 267-280.

[25]Rokicki, T., 2019, The lamb meat market in the European Union countries in 2007–2017. Acta Sci. Pol. Oeconomia 18 (1), 71–80, DOI: 10.22630/ASPE.2019.18.1.8,

https://pdfs.semanticscholar.org/3ce0/364ea08bd3a45b 84c6e41dfc8870ede159bf.pdf.Accessed on 10.12.2022. [26]Stanciu, S., Piața cărnii de ovine în România (Romanian sheep meat market), Conference: Perspective ale agriculturiisidezvoltăriiruraleprinprismanoiipoliticiagri colecomune 2014-2020 (Perspectives of agriculture and rural development through the lens of the New Common Agricultural Policy 2014-2020), Bucharest, 10 December 2014. https://www.researchgate.net/publication/270883722 P

iata_carnii_de_ovine_din_Romania.Accessed on 10.12.2022.