

RESEARCH REGARDING THE SITUATION OF SHEEP SIZE EXPLOITATIONS AND SHEEP BREED STRUCTURE IN ROMANIA

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Abstract

The purpose of this work is to investigate the situation of sheep size farms and sheep breed structure in Romania after the integration in EU. At present, in Romania the total number of sheep exploitations is extra-large (479,972 units) compared to that of the old EU member states (France, Germany, UK, etc.), which is due to the fact that there are still a few large farms (6,377 units with over 100 head/unit) and many units where the number per herd is very small (377,811 units with 1-10 head/unit). In these last units, the sheep are kept only for family self-consumption. As regards the sheep breed structure there are six breed classes in Romania which detain in order the following percentage from the globally sheep livestock: Tsurcana (52.4%), Tsigai (24.3%), Merinos (9.0), Crossbreeds (8.5%), Karakul (5.4%) and Other breeds (0.4%). In the last class are listed breeds which were imported in the recent years for improving the morpho-productive parameters of our local breeds such as Lacaune, Friesian, Texel, Suffolk, Bluefaced Leicester, Ile de France, Merinofleisch. From this situation it is pointed out that the Tsurcana breed has decreased from 65.0% (2003 year) to 52.4% (2008 year) of the total sheep livestock in Romania, the difference being taken mainly by the crossbreeds which have a superior rate of yield than the belated breed Tsurcana.

Introduction

Sheep breeding has been since ancient times a basic occupation of the Romanian people. This work dates from the beginning of his training and then continued, under various intensive forms. The development of this sector was due in large part to the conditions of soil and climate of our country and Romania was from this point of view one of the countries with the most appropriate conditions for sheep growth. Thus, a lot of pastures of the mountainous area shelter during the summer many herds of sheep, and in the field of agriculture the vegetal products find a good recovery by increasing the species. The phase-based on pastoral transhumance, which predominantly in sheep breeding until at the second World War, to switch gradually to forms more intensive, and the introduction from import of certain specialised breeds and also the creation of better conditions of maintenance. On the basis of new guidelines in sheep breeding, especially after 1950, were the national economy requirements for different products from this species. Thus, the direction in sheep breeding aimed primarily numerical increase in the number of breeds with fine wool for enhancing and improving the production of wool, along with the development of meat production. Also, in

Romania, until the year 1990 there were many state farms or cooperatives, majority from these with a great size (over 500 heads/farm) and a lot of individual agricultural holdings which that had owned between one and five sheep heads usually. These targets were in the attention of breeders only until the 1989 year (Taftă, 1997). Today, sheep livestock has decreased considerably compared to that existing in 1989, and the direction of exploitation is targeted exclusively for milk production, as following a much better price for milk and milk products compared with meat and wool.

Material and methods

The data were obtained from Ministry of Agriculture and Rural Development, National Institute of Statistics, National Agency for Improving and Reproduction in Zootechny and F.A.O. website. These data were used to do a comparison between years 2003 and 2008 (before and after the integration) to see what is happened with sheep breeding sector after the integration of Romania in E.U.

Results and discussion

In terms of size and structure of sheep farms in our country, the data provided by Ministry of Agriculture and Rural Development show that in the year 2008 there were 479,972 farms of sheep of which 78.72% are individual holdings that have an average number of 5.33 heads sheep per unit and which hold these animals exclusively for self-consumption of family and only 2.27% of total holdings have more than 100 heads, as average size of sheep holdings existing in the E.U. However, compared with the situation in the year 2003, the number of holdings decreased with about 25.0% in the year 2008, especially based on decreasing of individual holdings, respectively farms framed in under 10 heads class (table 1 and 2).

Table 1

The structure and size of sheep holdings in Romania in the year 2003
(source: National Institute of Statistics)

Specification	Number of exploitations	% from total	Agricultural individual exploitations	Commercial societies with juridical personality
1-2 heads	167,982	26.24	167,949	33
3-9 heads	330,697	51.67	330,624	73
10-19 heads	86,445	13.51	86,346	99
20-49 heads	32,557	5.09	32,444	113
50-99 heads	11,263	1.76	11,160	103
100-199 heads	6,596	1.03	6,492	104
200-499 heads	3,694	0.58	3,583	111
over 500 heads	777	0.12	677	100
Total	640,011	100	639,275	736

Table 2

The structure and size of sheep holdings in Romania in the year 2008
(source: Ministry of Agriculture and Rural Development)

Specification	Number of exploitations	% from total	Livestock (heads)	% from total	Average number (heads/unit)
Total	479,972	100	7,225,752	100	15.05
under 10 heads	377,811	78.72	2,012,228	27.85	5.33
11 - 20 heads	56,323	11.73	821,796	11.37	14.59
21 - 50 heads	22,369	4.66	695,798	9.63	31.11
51 - 100 heads	12,580	2.62	885,896	12.26	70.42
101 - 200 heads	6,377	1.33	919,209	12.72	144.14
201 - 500 heads	3,568	0.74	1,115,580	15.44	312.66
over 500 heads	944	0.20	775,245	10.73	821.23

Although the entire actually sheep livestock existing in the country are in private ownership, the average number of sheep per farm is extremely low, being only 15.05 heads, while in the E.U. this is 170 heads (Chatellier et col., 2000). It is still very little for a country as Romania which has in 2008 just so few farms sizes similar to those in the EU (only 10,889 farms of all 479,972 existing at the country level), in circumstances where after accession of Romania in E.U. this species has no restriction on milk quotas or other restrictions.

As regards the structure of breed sheep, there are six breed classes in Romania (year 2008) which hold, in order, the following percentages of totally sheep number: Tsurcana (52.4%), Tsigai (24.3%), Merinos (9.0), Karakul (5.4%), Crossbreeds (8.5%) and Other breeds (0.4%). In the last class are breeds which were imported in the recent years for improving the morpho-productive parameters of our local breeds such as Lacaune, Friesian, Texel, Suffolk, Bluefaced Leicester, Ile de France and Merinofleisch.

Table 3

The structure of sheep breed in Romania
(source: National Agency for Improving and Reproduction in Zootechny)

1990 year		2003 year		2008 year	
Breed	%	Breed	%	Breed	%
Tsurcana	38.0	Tsurcana	65.0	Tsurcana	52.4
Tsigai	20.0	Tsigai	25.5	Tsigai	24.3
Merinos breeds	38.0	Merinos breeds	6.5	Merinos breeds	9.0
Karakul and other breeds	4.0	Karakul and other breeds	3.0	Karakul	5.4
-	-	-	-	Crossbreeds	8.5
-	-	-	-	Other breeds (imported)	0,4

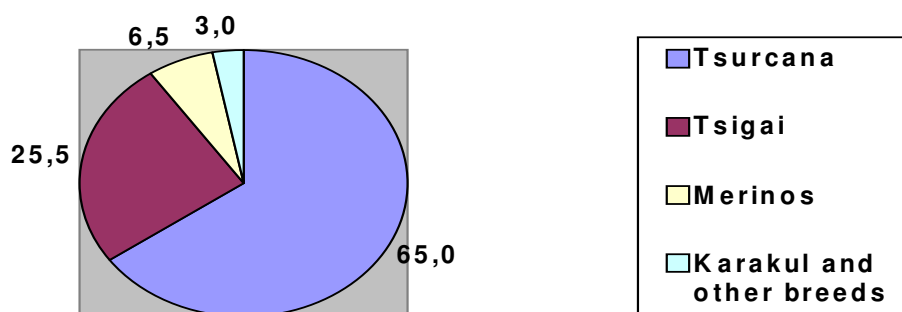


Figure 1. The structure of sheep breed in the year 2003

Of this situation it is pointed out that the Tsurcana has decreased from 65.0% (in the year 2003) to 52.4% (in the year 2008) of the total sheep number in Romania, the difference being taken mainly by the Crossbreeds which have a rate of yield superior than the breed Tsurcana (figure 1 and 2). It is notable that the structure of breed sheep has changed in the right direction.

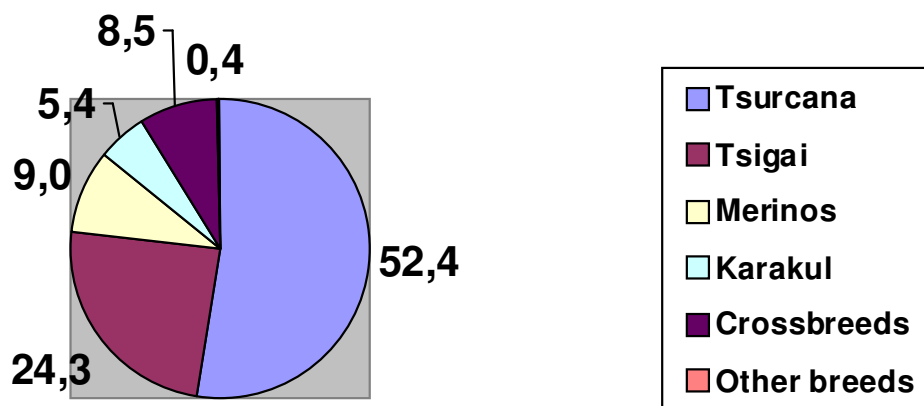


Figure 2. The structure of sheep breed in the year 2008

Given the potential for mixt exploitation of local sheep breeds in Romania, the geo-climatic favourable conditions for sheep breeding and the available fodder resources, along with economic integration of Romania into the European Union and especially in terms of agriculture in the near future, we believe that the current share of livestock and productions at this species in the European context are far from the real possibilities, fact who require a new reconsideration of sheep breeding sector to increase competitiveness of our country abroad (table 4 and figure 3).

To achieve the aforesaid goal, the need for Romania is a situation of these economic parameters in share values from Europe around 10-15%, so that milk production is the only parameter which is optimal from this point of view and this parameter also may be increased to a level much higher (about 20%). It is appropriate therefore that the total production of sheep's milk in Romania to be enhanced in particular by increasing the average milk yield, in relation to the productive capacity of each breed, either through the criss-cross of local breeds with specialized breeds, either through the improvement of selection level of each breed together with feeding and maintenance conditions of animals.

Table 4

The share of Romania in Europe in livestock of sheep and their productions in the year 2007
(source: website F.A.O., 2009)

Specification	UM	Europe	Romania	Share (%)
Sheep livestock	thousand heads	135,643	7,678	5.7
Meat production	thousand tonnes	1,296	57	4.4
Wool production	thousand tonnes	252	18	7.1
Milk production	thousand tonnes	2,820	485	17.2

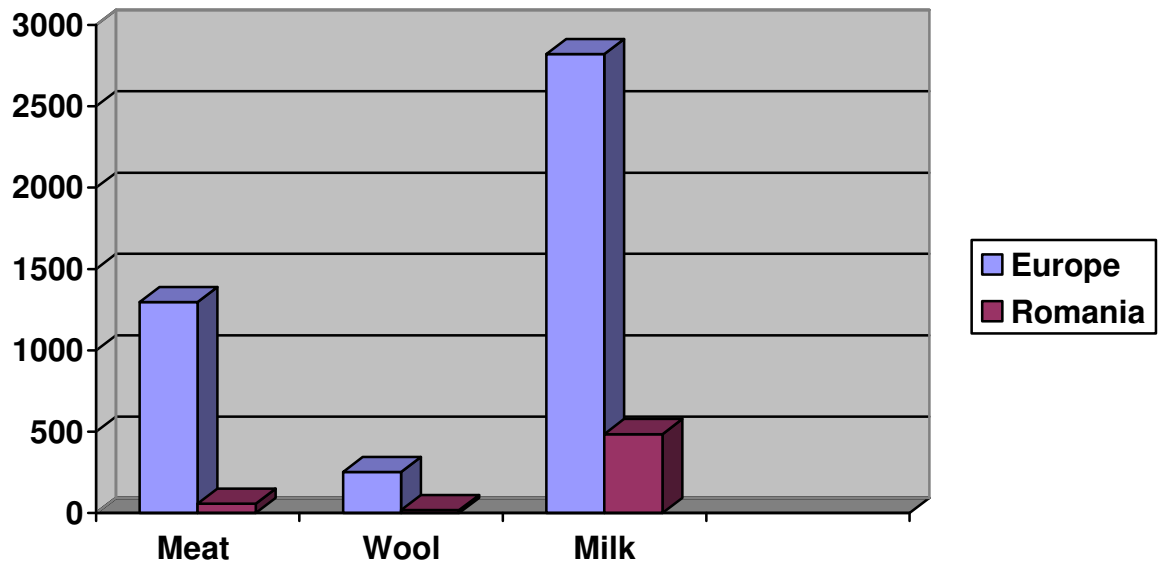


Figure 3. The share of Romania in Europe in productions obtained from sheep

Conclusions

1. In terms of size and structure of sheep farms in our country, the data provided by Ministry of Agriculture and Rural Development show that in the year 2008 there were 479,972 farms of sheep of which 78.72% are individual holdings that have an average number of 5.33 heads sheep per unit and which hold these animals exclusively for self-consumption of family.
2. There are six breed classes in Romania (2008 year) which detain in order the following percentage from the globally sheep livestock: Tsurcana (52.4%), Tzigaia (24.3%), Merinos (9.0), Karakul (5.4%), Crossbreeds (8.5%) and Other breeds (0.4%).
3. After integration of Romania in EU, the number of sheep holdings has dropped by a quarter compared to the previous situation and the structure of breed sheep has changed in a right direction.
4. Given the potential for mixt exploitation of local sheep breeds in Romania, the geo-climatic favourable conditions for sheep breeding and the available fodder resources, along with economic integration of Romania into the European Union and especially in terms of agriculture in the near future, we believe that the current share of livestock and productions at this species in the European context are far from the real possibilities, fact who require a new reconsideration of sheep breeding sector to increase competitiveness of our country abroad.

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