

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

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Abstract

The purpose of this work is to investigate the situation of goat farms size and goat breed structure in Romania after the integration in EU. At present, in Romania the total number of goat exploitations is still high (131,795 units) compared to other EU member states with tradition of rearing this species (France, Greece, Spain, etc.), which is due to the fact that there are still a few large farms (1,789 units with over 50 head/unit) and many units where the number per herd is very small (121,779 units with 1-10 head/unit). In these last units, goats are kept only for family self-consumption. However the total number of goat exploitations was significantly reduced in 2008 compared to 2003, respectively 44%. As regards the goat breed structure there are five breed classes in Romania which detain in order the following percentage from the globally goat livestock: Carpathian (91.30%), White Banat (7.37%), Saanen (0.30), French Alpine (0.07%) and Crossbreeds (0.96%). In recent years were imported dairy breeds such as Saanen and French Alpine to improve the milk production of local Carpathian breed. Crossbreeds resulting from these crosses are characterized by a better body conformation and a double milk production versus local Carpathian breed.

Introduction

Goat farming systems in Romania fits the requirements of traditional farming technologies and a very little increase in semi-intensive systems. This system is justified by the large area of grassland and meadow which represents 30% of Romania's arable land. In this context, there are a large number of farms that have under 10 goats, representing approximately 92.4% from total farms, the remaining holdings are above this number. As regard the sheep and goats livestock, at the end of 2009 year, Romania ranks fourth among EU member states as Spain, Britain and Greece, and as regard the density of these species at 100 ha farmland, our country is after Greece, Spain, United Kingdom, Portugal, Italy and Holland. Currently, after INS (2009 year) and FAO (2008 year), Romania is growing 10,059 thousands sheep and goat heads, of which 865 thousands heads are goats. Although numerical evolution of goats showed an upward trend after 1990 year, the number of goat farms where the goats are growing over 50 is less than 2%. The main breed, respectively Carpathian breed (which represent over 90% of total goats breeds in Romania), is well suited to the geo-climatic conditions of our country but she has a low lactogen potential in milk production, compared with Saanen and French Alpine breeds, the main breeds reared in EU countries.

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 FAO website. These data were used to do a comparison between years 2003 and 2008 (before and after the integration) to see what happened to the goat breeding sector as Romania's EU integration.

Results and discussion

In terms of size and structure of goat farms in our country, the data provided by Ministry of Agriculture and Rural Development show that in the year 2008 there were 131,795 farms of goat of which 92.40% are individual holdings that have an average number of 3.28 heads goats per unit and which hold these animals exclusively for self-consumption of family and only 1.44% of total holdings have more than 50 heads, as average size of goat holdings existing in the E.U. However, compared with the situation in the year 2003, the number of goat holdings decreased with about 43.85% 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 goat 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	169,615	72.77	169,589	26
3-9 heads	53,496	22.79	53,465	31
10-19 heads	7,034	3.00	7,010	24
20-49 heads	3,384	1.44	3,358	26
50-99 heads	858	0.37	843	15
100-199 heads	282	0.12	274	8
200-499 heads	32	0.01	32	-
over 500 heads	4	0.001	2	2
Total	234,705	100	234,573	132

Table 2

The structure and size of goat 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	131,795	100	767,414	100	5.82
under 10 heads	121,779	92.40	399,109	52.01	3.28
11 - 50 heads	8,121	6.16	167,462	26.17	24.73
over 50 heads	1,789	1.44	132,391	21.82	88.37

Although the entire actually goat livestock existing in the country are in private ownership, the average number of goats per farm is extremely low, being only 5.82 heads, while in the EU this is 26 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 9,910 farms of all 131,795 existing at the country level), in circumstances where after accession of Romania in EU this species has no restriction on milk quotas or other restrictions.

As regards the goat breed structure there are five breed classes in Romania which detain in order the following percentage from the globally goat livestock: Carpathian (91.30%), White Banat (7.37%), Saanen (0.30%), French Alpine (0.07%) and Crossbreeds (0.96%). In recent years were imported dairy breeds such as Saanen and French Alpine to improve the milk production of local Carpathian breed. Crossbreeds resulting from these crosses are characterized by a better body conformation and a double milk production versus local Carpathian breed.

Table 3

The structure of goat breeds in Romania
(source: Caprirom – Romanian National Association of Goat Breeders, 2008)

Breed	Livestock (heads)	% from total livestock	Average mik production (liters)
Carpathian	619,000	91.30	200-300
White Banat	50,000	7.37	350-450
Saanen	2,000	0.30	550-650
French Alpine	500	0.07	450-600
Crossbreeds	6,500	0.96	400-550
Total	678,000	100	-

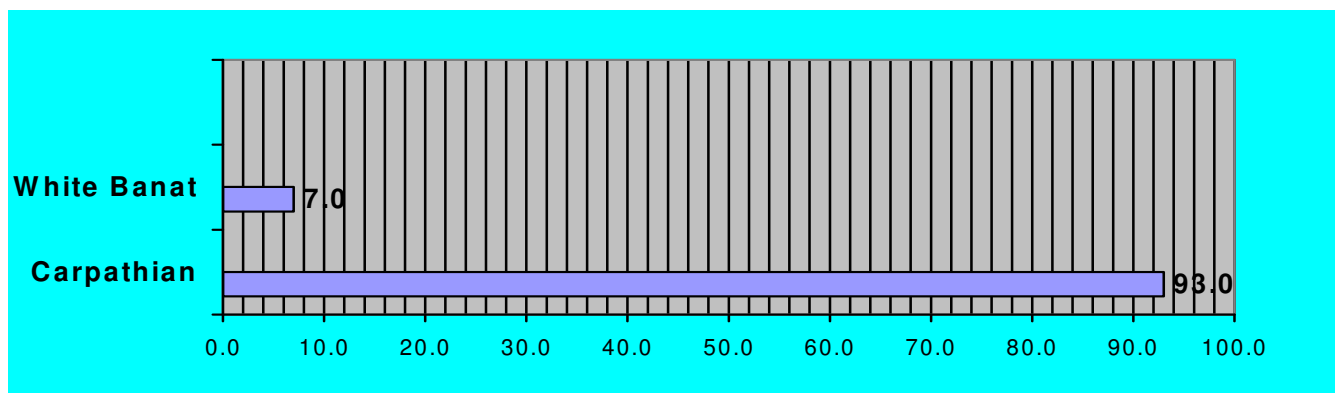


Figure 1. The structure of goat breed in the year 2003 (%)

Of this situation it is pointed out that the Carpathian breed has decreased from 93.0% (in the year 2003) to 91.3% (in the year 2008) of the total goat number in Romania, the difference being taken mainly by the Crossbreeds which have a rate of yield superior than the breed Carpathian

(figure 1 and 2). It is notable that the structure of the goat breed began to change in the right direction.

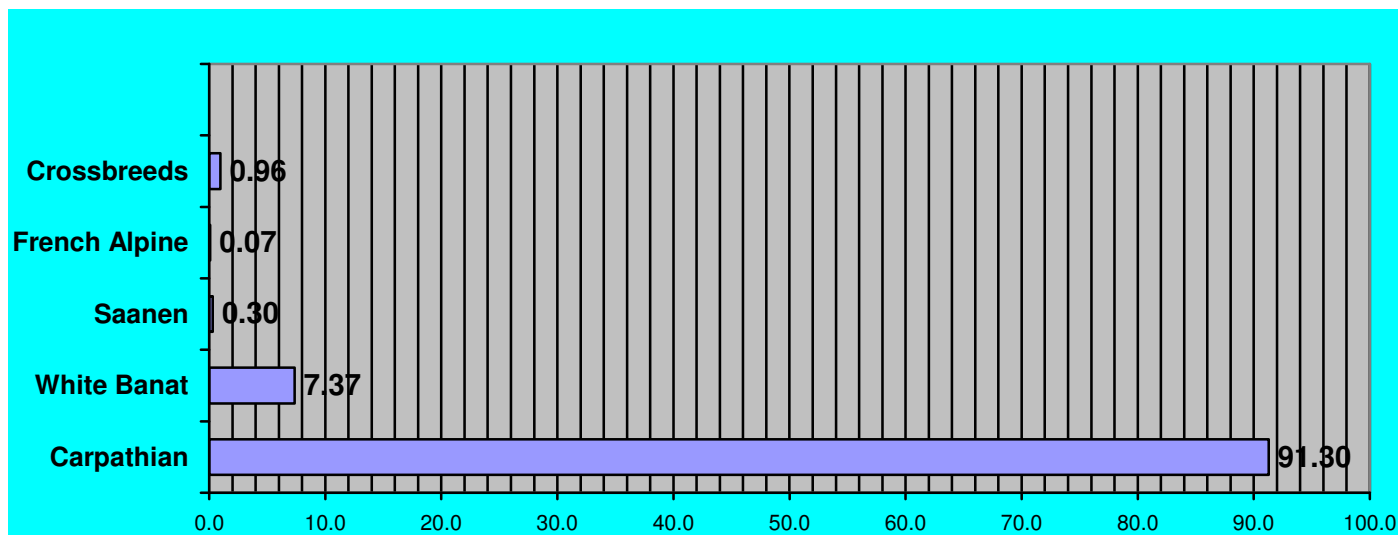


Figure 2. The structure of goat breed in the year 2008 (%)

Given the potential for mixt exploitation of local goat breeds in Romania, the geo-climatic favourable conditions for goat 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 goat 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%, so that milk production is the only parameter that is close to optimum economic and may be increased to a level much higher (about 10-15%). It is appropriate therefore that the total production of goat'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 by crossing the 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 goat and their productions in the year 2008
(source: website F.A.O., 2010)

Specification	UM	Europe	Romania	Share (%)
Goat livestock	thousand heads	17,993	865	4.81
Meat production	thousand tonnes	124.1	4.1	3.30
Milk production	thousand tonnes	2,584	184.8	7.15

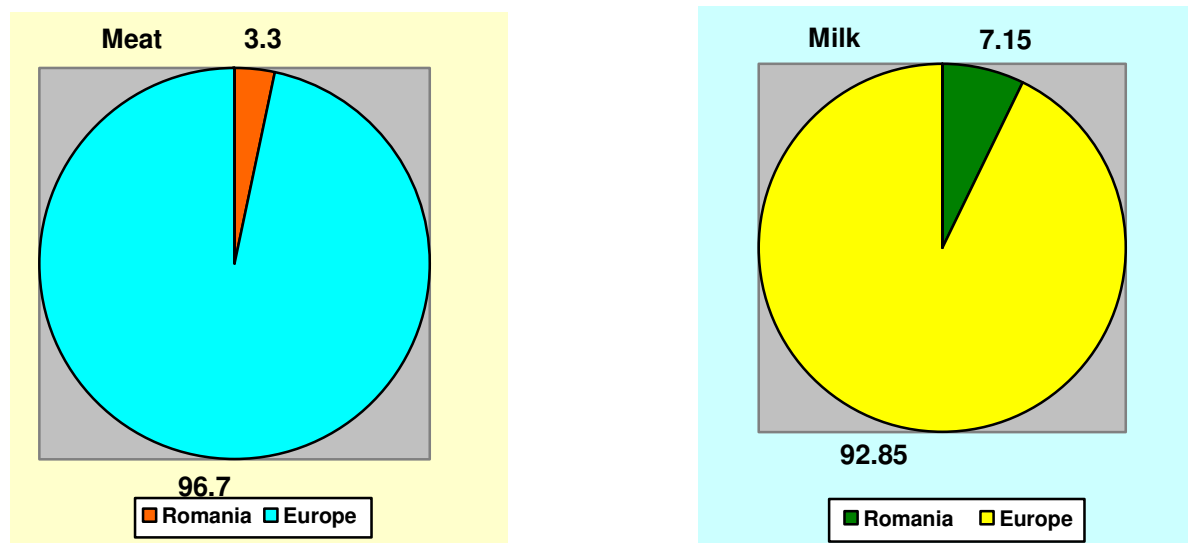


Figure 3. The share of Romania in Europe in productions obtained from goats (%)

Conclusions

1. In terms of size and structure of goat farms in our country, the data provided by Ministry of Agriculture and Rural Development show that in the year 2008 there were 131,795 farms of goats of which 92.40% are individual holdings that have an average number of 3.28 goats heads per unit and which hold these animals exclusively for self-consumption of family.
2. There are five goat breeds classes in Romania (2008 year) which detain in order the following percentage from the globally goat livestock: Carpathian (91.3%), White Banat (7,37%), Saanen (0.3), French Alpine (0,07%) and Crossbreeds (0.96%).
3. After integration of Romania in EU, the number of goat holdings decreased by approx. 44% compared with the situation in 2003 and the structure of goat breed has changed in a right direction.
4. Given the potential for mixt exploitation of local goat breeds in Romania, the geo-climatic favourable conditions for goat 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 goat breeding sector to increase competitiveness of our country abroad.

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