

**DYNAMICS OF LIVESTOCK AND PRODUCTION OF SHEEP AND GOATS  
EXPLOITED IN FARMS FROM ROMANIA**

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**ABSTRACT**

With its about 10 million sheep and goats, Romania ranks third in Europe after United Kingdom and Spain. Though, in Romania, lamb consumption is significant only at Easter, at world level mutton is much appreciated. In Romania, according to the General Agricultural Census in 2010, there were 8,386,000 sheep, of which 8,152,000 (97.21%) on agricultural establishments with no legal personality and 234,000 (2.79%) on legal personality establishments. There were also 1,237,000 goats exclusively on farms with no legal personality. The domestic market, lamb demand has decreased these last years significantly because of the decrease of the purchase power of the Romanians and because of the better export price. Demands at world level ask Romanian sheep breeders to improve their animals in order to produce better meat and milk. Romania benefits from a series of factors that will allow it, in time, to achieve better performances both quantitatively and qualitatively, particularly in sheep.

**Keywords:** sheep, Romania, production, numbers, quality

**INTRODUCTION**

Sheep raising is a special branch of Romanian animal husbandry and the single one to have increased these years (we refer here to the number of animals) (ELOSEN I. 1999, PETROMAN I, 2007, PETROMAN I., 2000).

Taking into account the goals of raising sheep in time, sheep breeders have always worked to improve the breeds and to select only those animals that meet the goals (AVRAMESCU DANIELA ET AL., 2013, HARESING W. 1988, PETROMAN I. 1998). Thus, they have developed and specialised breed groups per production types: there are, nowadays, according to literature, over 750 sheep breeds on earth, each of which are specialised in either meat, milk, wool, skin, or fur.

The sheep breeds we raise in Romania nowadays are extremely heterogeneous from the point of view of their production, except for the sheep breed Merinos de Palas, famous for their good meat and fine wool (PADEANU I. 2002).

Even in these conditions, where we need to select the sheep, sheep breeders have made considerable profits in 2012 and the market still has an increasing potential. Sheep raising has ranked Romania 3 these last 2-3 years (it used to rank 6 in the past) in Europe in the number of sheep, overrating countries with a long-lasting tradition in the field such as France, Italy, or Greece. This is the reason why more and more Romanian farmers switch to sheep and goat raising for export.

In Romania, most sheep and all goats are owned by private farmers who use them to produce milk. Yet, these last years Romania has also known farms that raise sheep and goats for a few months after which they sell them for meat consumption on Arab markets. Romanian consumers prefer lamb from young animals slaughtered when weighing 10-12 kg, unlike Western Europe, where they slaughter sheep when weighing 30-35 kg, with a

marble-like meat and with no obvious fat deposits (PAUNCHICI, 2004, PETROMAN, 1999, PETROMAN, 2007). Arab countries prefer fatter carcasses. In these conditions, sheep selection in Romania has to take into account the different trends depending on the destination country.

Improving sheep for meat should aim at improving fertility expressed as prolificacy, increasing precocity through improving growth speed and feed valorisation and, last but not least, improving carcass quality.

Improvement programmes include selection plans for sheep populations at the top of improvement pyramid, together with simple and double cross schemes on multiplication and commercial farm levels (PETROMAN, 2009). In Romania, sheep meat production should be obtained not only from meat sheep breeds because of low prolificacy, which makes the commercial produce more expensive. To increase the efficacy of the final produce, i.e. of the sheep carcass, it is recommendable to practice double crossing of prolific breeds (Romanov) in order to obtain not only higher quality lamb meat, by also larger numbers of lambs.

## MATERIAL AND METHOD

The present research is necessary because of the low level of sheep productions and particularly because of the carcass quality and weight upon slaughter. This is the reason why, in the present scientific approach, we relied on data collected from statistics yearbooks and on information from different journals (*Business Resource Guide in the Meat Industry*), national studies of the Produce Association and of the Carcass Classification Commission, as well as results of our own investigations, data that we have processed and turned into tables and diagrams, which allowed us to draw our own conclusions and to make our own recommendations.

## RESULTS AND DISCUSSION

In Romania, in 2011, the demand for lamb dropped significantly because of the low purchase power of the Romanians, and lamb price was about 20% higher than in 2010 (*Table 1*).

**Table 1. Dynamics of sheep number and sheep meat production between 2001 and 2011**

	UM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total number of sheep and goats	thousands of heads	7,776	7,945	8,125	8,404	8,921	8,406	9,334	9,780	10,059	9,623	11,331
Total live sheep and goat meat production	thousands of tonnes	114	118	135	166	114	101	110	104	104	100	150

Source: Ministry of Agriculture and Rural Development (in *Business Resource Guide in Meat Industry: Annual Report, 2012*)

The annual offer of sheep and goats is about 3 million lambs and kids. According to the statistics of the Ministry of Agriculture and Rural Development, there were, in Romania, at the end of 2011, 11,494,000 sheep compared to 9,800,000 in 2008 (*Figure 1*).

The commercial trade of sheep meat is, at present, about 950,000 t, i.e. 11% of the total sheep meat, of which 90% carcass due to the more attractive price and 10% live animals (Table 2).

The main importers of sheep meat are, generally, developed countries such as France, United Kingdom, Japan, USA, Canada and Italy, and such Arab countries as Jordan, Saudi Arabia, and the United Arab Emirates.

The greatest sheep exporters are Australia and New Zealand, which supply about 70% of the total sheep meat exported worldwide, particularly as carcass.

In this context, Romania has a great potential to produce sheep meat and meet on a regular basis, both domestic and foreign demands at standard levels.

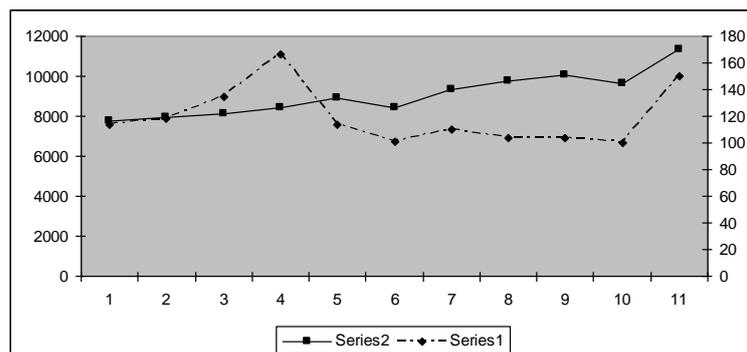


Figure 1. Evolution of sheep number and live meat production

In this context, lamb fattening after the most modern technologies (intensive and semi-intensive) becomes a first rank necessity in Romania. It is extremely important to correlate improvement measures through selection of domestic breeds and types for meat production and crossing and development of hybrids with the most suitable meat sheep breeds.

Sheep meat produced in Romania according to European quality standards is an asset of Romanian sheep raisers.

Table 2. Mean weight of sheep upon slaughter between 2001 and 2011

	UM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Mean weight upon slaughter	kg/head	23	27	23	28	19	18	18	17	17	16	21

In Romania, lamb is the most consumed sheep meat: Romanians slaughter lambs in March, April, or May, before Easter, which makes lamb consumption a seasonal, ritual consumption. Lamb consumption is estimated at about 2.1 kg/inhabitant/year.

Table 3. Number and weight of sheep and goat upon slaughter during the period 2009-2011

	Number of animals (thousands of heads)			Weight of carcasses (tonnes)		
	2009**	2010**	2011*	2009**	2010**	2011*
Total sheep and goats slaughtered	6,122	6,150	7,247	50,975	47,157	69,503
Of which in specialised industrial units	120	377	357	1,349	4,432	4,131

\*Provisional data: data concerning the specialised industrial units were collected through exhaustive statistics research, and data concerning individual farms were obtained from the Ministry of Agriculture and Rural Development

\*\*Real data

In 2010, the number of sheep and goats slaughtered in specialised industrial units increased in a spectacular way compared to 2009 – 213.4%, and sheep and goat meat production also increased with about 228.5% (Table 3).

According to the National Institute of Statistics (in Business Resource Guide in Meat Industry, Annual Report, Romania 2012), in 2011, compared to 2010, the total number of sheep and goats slaughtered and the weight of sheep and goat carcasses increased with 17.8% and 47.3%, respectively.

Slaughters in specialised industrial units decreased from the point of view of the number of animals (with 5.3%) and from the point of view of the carcass weight (with 6.8%).

The number of sheep and goats increased year after year: at the end of February 2012, there were already 15.4 million heads, of which 13.7 million sheep. The number of reproduction female sheep and goats reached, in March 2012, 8.12 million heads. In January 2012, the total number of sheep and goats slaughtered decreased, compared to December 2011, with 60.6%, and the carcass weight decreased, compared to December 2011, with 59.8%.

Slaughters in specialised industrial units, which represented 4.37% of the total sheep and goat slaughters during the period 2009-2011, decreased in 2012 with 76.5% in number and with 73.7% in carcass weight.

In January 2012, compared to January 2011, the total number of sheep and goats slaughtered decreased with 15% and the carcass weight decreased with 16%. Meanwhile, slaughters in specialised industrial units and carcass weight increased in January 2012 compared to January 2011 with 33.3%, and with 37.0%, respectively.

## CONCLUSIONS

The diversity of production in sheep, the low energy consumption and the nature of fodder sheep consume make sheep breeding a basic, sustainable and prospective occupation. There are, in Romania, in the near future, favourable conditions for larger amounts of sheep meat to be exported, which will allow large and small sheep raisers incomes to increase. As for the sales on the international market of fresh or refrigerated lamb, Jordan, Italy and Croatia are the main countries that have purchased it from the Romanian market, with a total of 15.5 million Euros in 2001, for 3.171, 5 to.

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