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PRIMARY MILK OFFER IN CASTRANOVA VILLAGE, DOLJ COUNTY

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Abstract

Castranova village is situated in the south-eastern county of Dolj on county road Leu - Visina (35 km from Craiova), limited in the north by the commune Leu, Apele Vii to the east of village, south and west by the commune Marsani and Bratovoieşti. Commune is composed of villages and wells Castranova. In the village there are 12 agricultural companies and two companies. Specific of the area is agriculture, mainly large crop: wheat and maize farming. Simultaneously develop livestock sector, and milling and bakery activities. Elucidating the communal potential, of milk production is based on use of an appropriate set of indicators: effective in exploitation (by species), total production and average yield per head. The study covers the period 2010-2012, taken as a starting point for developing a strategy of reviving the sector of production.

Key words**:** *livestock, meat production, potential*

INTRODUCTION

Productive use of animal species is based on the importance of the food industry, for the capitalization of some secondary forage resources, the use of labor resources, source of export items, profit source [1].
The characteristics of the capital animal are: animals constitutes a conversion - convert feed into meat and other vegetable products, milk and so on, is a "equipment" alive, it renews itself, to the detriment of the final product, is an organized grouping: flock base. Basic herd has a structure corresponding to each species and growth guidelines.
For choosing of animal breeds is appreciated following: features on the requirements to natural factors and to environmental conditions, genetic potential for yield practicable to attain (average milk yield - l / day feeding) daily average weight gain - g / day feeding, average wool production - kg / capita, average egg production - piece / cap., specific consumption of food (feeder units (UN) / l milk, UN / head, UN / kg weight gain in weight, kg feed / kg gain of weight gain etc..) feed rations structure required; consumption of labor required; reaction to intensification; specific investment, payback period [3].
The livestock structure is influenced by the particularities of breeding of different species, breeding system practiced towards of production, herd size used, etc. [2].

MATERIALS AND METHODS

Making the work was based on running two stages stage or office documentation and processing. After the documentation in the territory [4], data processing was performed by using the comparison method in time and composition of structures based on certain indicators used. The data collected and analyzed covers the period 2010-2012, using also the average period.

RESULTS AND DISCUSSIONS

Table 1 shows the production of milk for the main species that are found at Castranova commune level, analyzing livestock sacrificed (Fig. 1), total meat production that was obtained (fig. 2) and the average milk yield (fig. 3).
In the structure of milk production are to be found animals in the following species: cattle, sheep and goats.
It can be observed that in the milk production of cows, the bovine animals used ranged from 176 heads in 2010, up to 210 heads in the case of 2012, while the average period reached 196

heads. Upward trend emphasizes the dynamics of herds: 14.2% in 2011 compared with 2011, 19.3 also 4.5% in 2012 to the terms of reference (2010 and 2011). Average ahead of 1.11 times the first term of the dynamic series, but is less by 6.7% compared to the previous term dynamic series.

For sheep herds used in the production of milk ranged from 1,500 to 1795 heads for the years 2012 and 2010 respectively. Under these conditions average of the period reached 1648 heads (-9.2% compared to 2010 and 9.9% compared to the specific situation of 2012). Dynamics of indicators underlines the downward trend, of its successive annual declines were 8.1% in 2011 and 9.1% respectively for 2012.

Table 1. The milk production

No. crt.	Specification	Year									Average 2010-2012		
		2010			2011			2012					
		Effective	Dynamic		Effective	Dynamic		Effective	Dynamic		Effective	Dynamic	
			F_{bi}	M_{bi}		F_{bi}	M_{bi}		F_{bi}	M_{bi}		F_{bi}	M_{bi}
1	**Number in exploitation (head)**												
1.1.	- cattle	176	100	100	201	114,2	114,2	210	119,3	104,5	196	111,4	93,3
1.2.	- sheep	1795	100	100	1650	91,9	91,9	1500	83,6	90,9	1648	91,8	109,9
1.3.	- goats	485	100	100	267	55,1	55,1	205	42,3	76,8	319	65,8	155,6
2	**Total production (hl)**												
2.1.	- cow milk	8448	100	100	10000	118,4	118,4	9660	114,4	96,6	9369,3	110,9	97,0
2.2.	- sheep milk	2690	100	100	2500	92,9	92,9	1900	70,6	76,0	2363,3	87,9	124,4
2.3.	- goat milk	2610	100	100	1130	43,3	43,3	800	30,7	70,8	1513,3	58,0	189,2
3.	**Average production (l/cap.)**												
3.1.	- cow milk	4800	100	100	4975	103,7	103,7	4600	95,8	92,5	4780	99,6	103,9
3.2.	- sheep milk	150	100	100	152	101,3	101,3	127	84,7	83,6	143	95,3	112,6
3.3.	- goat milk	538	100	100	423	78,6	78,6	390	72,5	92,2	474	88,1	121,5

For goats has averaged 319 heads, with limits of variation from 205 heads in 2012 to 485 heads in 2010. The indicator is placed on a strict descendent trend, the dynamics is dominated by the subunit levels of component index (55.1% in 2010, 42.3 and 76.8% in 2012, 65.8% of the average of period - compared to the first dynamic within the series). The only over-unit value of dynamic characterized the average of period - 155.6% - compared to previous term (2012).

Total milk production of cows was between 8448 hl in 2010 to 10000 hl in 2011, the average of period being 936937 hl. Dynamics of indicators highlights fluctuations, the trend being an increasing one (18.4 and 14.4% respectively in 2011 and 2012 compared to the first term of the dynamic series, -3.4% in 2012 compared with the previous period of the dynamic series). Average exceeds by 10.9% the first term of the dynamic series, but 3.0% lower than previous term (2012).

In the case of sheep there was a average milk production of 2363.3 hl (-12.1% compared to the year 2010, 24.4% compared with the previous term of the dynamic series), which is based on sequential annual levels of: 1900 hl in 2012 (-29.4 and -24.0% compared to the years 2010 and 2011), 2500 hl in 2011 (-7.1% compared with the first series of dynamic) 2690 hl for 2010.

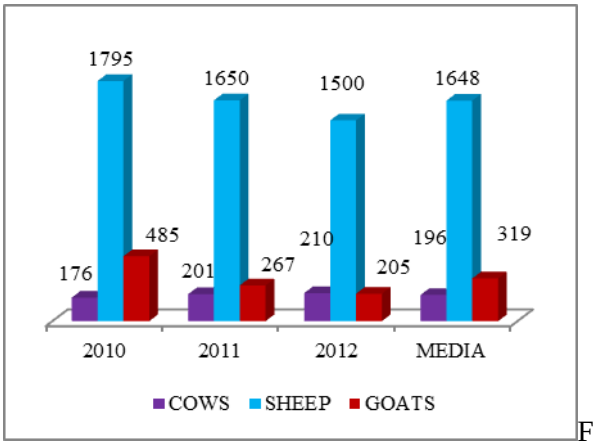

Fig. 1. Total livestock used in the production of milk (heads)

Goats provided between 800 and 261 hl of milk (2012 and 2010), an average of 1513.3 hl (in conditions of 1130 hl in 2011). Dynamics of indicators highlights the evolution strict descendant - decreased by 56.7% in 2011 compared to 2010, 69.3 and 29.2% respectively compared with the terms of reference in 2012 to 42.0% in average compared to the first term of the period in the dynamic series (over-unit value for mobile based indexes - 189.2%).

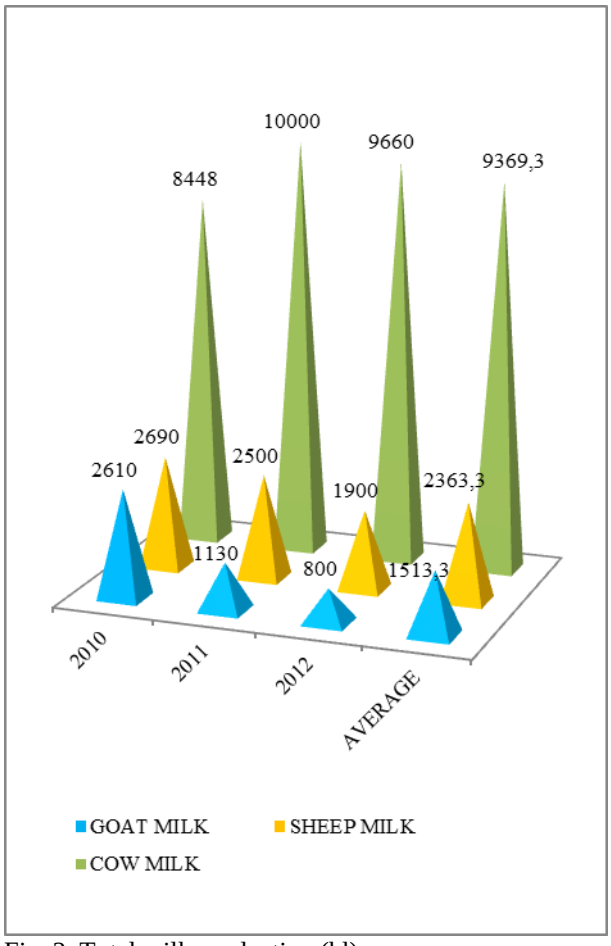

Fig. 2. Total milk production (hl)

In the case of the average milk yield the situation is as follows: the average production per cow was 4780 liters, variation limits from 4600 to 4975 l - in 2012 respectively 2011. Indicator evolved unevenly, but low limits (exceeding maximum of the reference term was 3.9% - for mobile based indices, on period average, while the largest decrease was -7.5% in 2012 from the previous term dynamic series) for sheep the average milk yield ranged from 127-152 l (2012 and 2011), average of the period being of 7143 l. Dynamics of indicators underlines timid growth in 2011 (+1.3% compared with 2010), decreased for 2012 (-15.3 and -16.4% respectively to the terms of reference), and placement under and over reporting bases for average of the period (-4.7 and 12.6% respectively compared to 2010 and 2012); goats is characterized by an average milk production of 474 l (period average) than the absolute variations were: - 84 l in 2012 l in 2011 and 64 -51 l for 2010. Indicator evolved descendent for the period under review (dynamics is dominated by the subunit levels of component index, exceptions for those with mobile base on period average - 121.5%).

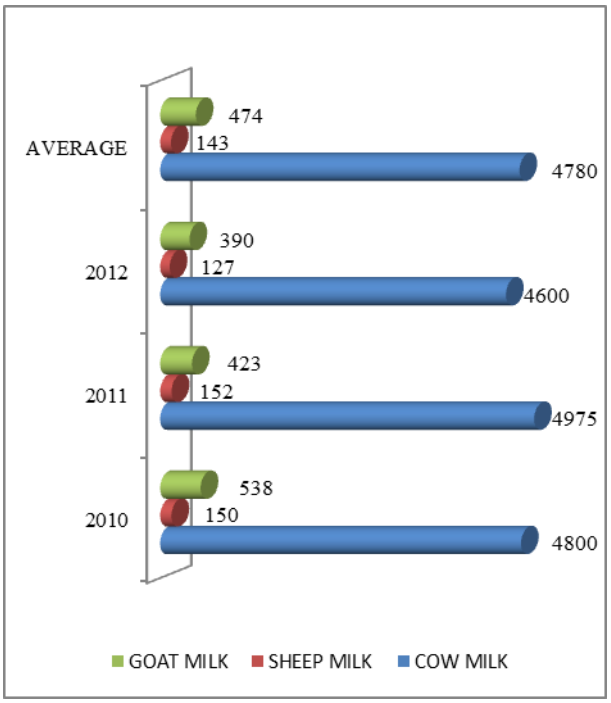

Fig. 3. Average milk production (l/cap)

CONCLUSIONS

The Commune Castranova, by its surface, represents 0.91% of the total surface at county level and can be considered a medium-sized village for Dolj County taking into account the existing 114 administrative territorial units (municipalities, cities and towns).

If we compare the total production related to the livestock sector, the situation of the county, we can emphasize the following

weights: 1.08% of the total milk production of cows (9369.3 to 871 000 hl) 1.22% of total milk production (13245 9 to 1.086 million hl), 1.80% of sheep and goat milk (3876.6 to 215000 hl);
The total milk production structure (13245.9 hl) was as follows (Fig. 4.): 70.73% cows milk, sheep milk 17.84%, 11.43% goats milk;
d. is noted the need to develop zootechnical sector, both in terms of reinvigorating the herds, and through the angle of improving the structure for race so as to achieve proper operation of the existing potential, both in terms of natural and socio-economic point of view. It can exploit the potential of the area suitable for sheep and goats than cattle - growing poorer, due to the existence of sandy soils.

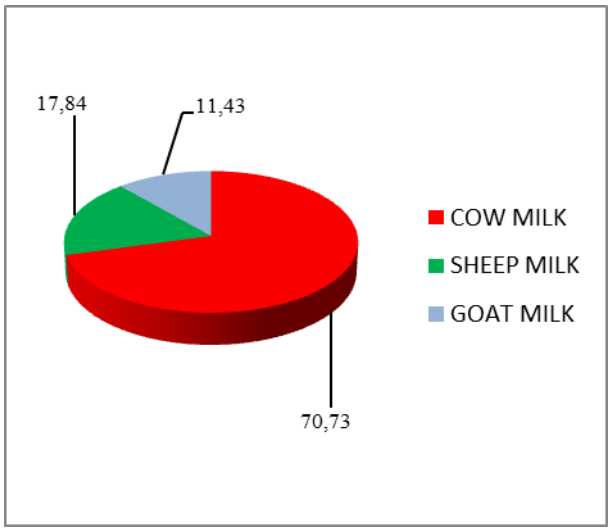

Fig. 4. The structure of milk production - period average (%)

REFERENCES

[1]Barbu, C., Pânzaru, R.L, 2000, Agricultural Economics, Hyperion Publishing House, Craiova, Chapter 7, Part II, p 331-365
[2]Pânzaru, R.L, Medelete, D.M, Stefan, G., 2007, Elements of management and marketing in agriculture, Universitaria Publishing House, Craiova, Chapter 6, pp. 116-148
[3] Stefan, G., Bodescu, D., Toma, A.D., Pânzaru, R.L., 2007, the economy and agri-food chain, Alpha Publishing, Iaşi, Chapter 3, pp. 53-157
[4] City Hall Castranova, Statistical Reporting Data, 2010-2012