

STUDIES REGARDING THE DEVELOPMENT OF THE ANIMAL PRODUCTION IN THE CENTRAL MOLDAVIAN PLATEAU

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Abstract

Agriculture, as a branch of economy, uses as a main means of production, the land. The aims of the study is to analyze the animal production under the aspect of the structure of main animal species on natural areas, average number of animals grown in private households on natural areas, number of animals grown in association exploitations and their ratio in the total number of animals, from Central Moldavian Plateau. Therefore, although the level and structure of agricultural production are influenced by the needs of consumption (on the market), the realisation of different products, on the conditions of economic efficiency, also takes into consideration the zoning of each species of plant. The development of husbandry production in Central Moldavian Plateau is influenced in a great way by the area character of its placement. A part of the animals from the limited companies could be found in the private household which bought the animals. The future in association units is to keep the number of animals. On species at cattle's and pigs the tendency is stationary, at sheep is decreasing and at birds is increasing.

Key words: Central Moldavian Plateau, animal production, association units, private household

MATERIAL AND METHOD

In order to carry out the analysis on current situation of animal husbandry in the Central Moldavian Plateau, its trends over time and its future we have used a variety of statistics, some with official character, (Statistical Yearbook of Romania), some from internal records of economic companies or direct inquiries to the regional authorities in agriculture.

The data processing was carried out by statistical methods resulting in a series of indicators and indicators that enabled the evolution and trends phenomena characterization of animal production development in this area.

RESULTS AND DISCUSSIONS

Agriculture as a branch of the national economy, uses, as the principal means of production, land and animals. This case study aims to analyze the structure of livestock production in terms of animal species and age and natural areas, the average number of animals in private farms and micro and other associative forms of Central Moldavian Plateau.

From another perspective, the level and structure of animal production is affected by the needs of the consumers (market), making different products in terms of economic efficiency, taking into account the zoning of agricultural production for each species of plant or animal. Development of livestock production in Central Moldavian Plateau is influenced largely by the character code and the location of farms with sales centres. Much of the farmed animals are breeding for SRL type auto-consumption and only a small proportion are sold in the market. We believe that in the future, family associations and other types of farms will increase the number of animals for sale, especially in swine and poultry, to capitalize on higher crop products. In cattle and swine species by total area, the trend is to maintain the number, the number of sheep is declining, while the birds are found a slight increase.

Central Moldavian Plateau has 68 communes and 3 urban centres (Vaslui, Husi, Negresti) related Vaslui, Iasi, Bacau and Neamt this: 26 communes in Iasi County, 28 in Vaslui County, and one common 7 counties Neamt and Bacau.

Most municipalities have Agricultural dominant economic functions and only some of which are agricultural-industrial (Raducaneni, Costesti). The major towns, borough or centres of polarization, are present and other functions: trade, craft, local industry. The prevailing are settlements with grain profile, but some of the localities in southern Central Moldavian Plateau be added industrial crops and livestock.

Rural household has changed in relation to demographic transition to a market economy. The Central Moldavian Plateau shows a reduction in the size of the family demographic, which is determined by geographic and occupational mobility,

slowing birth rate, low natural increase of rural population.

These demographic trends are evident throughout the country, but also in the Central Moldavian Plateau and have implications for reducing the active constituents of the household herd, but also the share of households consisting of more than 5 persons.

In the rural area of Central Moldavian Plateau is found that there was a clear trend of decrease of the number of households consisting of two three nuclear family and a steady growth in the number of households consisting of a single family nucleus.

Table 1
Structure of households on types and number of persons (2008)

County		Vaslui		Bacău		Iași		Neamț		
		Nr.	%	Nr.	%	Nr.	%	Nr.	%	
Population households TOTAL	Households	150850	100	237827	100	257877	100	189606	100	
	Persons	450978	100	698009	100	788355	100	549259	100	
Family households TOTAL	Households	121631	80.63	192069	80.76	209324	81.17	152745	80.56	
	Persons	419524	93.03	647442	92.76	733494	93.04	508596	92.60	
Family households made of :	1 nucleus	Households	113515	75.25	179938	75.66	195342	75.75	142039	74.91
		Persons	373459	82.81	578253	82.84	653244	82.86	449577	81.85
	2 nuclei	Households	7775	5.15	11466	4.82	13238	5.13	10245	5.40
		Persons	43067	9.55	63112	9.04	73656	9.34	55114	10.03
	3 nuclei and over	Households	341	0.23	665	0.28	744	0.29	461	0.24
		Persons	2998	0.66	6077	0.87	6594	0.84	3905	0.71

The agricultural area is limited to a territory in some areas agro-geographical data that is specific natural and economic characteristics. Regional systems of agriculture can be defined in terms of terrain, climate, water, soil, etc. Basics of nature, the main environmental factors, which influence the size and outstanding quality processes, physical, chemical, and biological structures determine the specific agricultural production. In addition, agricultural techniques and technologies can cause regional agricultural systems.

Livestock is based on the existence of large areas of pasture and forage crops. Poor technology of farms of Central Moldavian Plateau, with employment and production animals, is endemic, with some differences in particular micro data naturally. In this regard, further analysis was needed of the technical

equipment of households in the localities associated Central Moldavian Plateau. [1]

Density (charge) animals at 100 hectares (UVM - livestock units /100 ha), is calculated as the ratio between the total number of animals expressed in UVM (all turn-based factors - cattle = 1.00, pigs = 0.30, sheep = 0.15; birds = 0.004) in a conventional unit - UVM, offering the possibility of a relevant analysis and comparability.) and the total agricultural land of the municipality multiplied by 100. Indicator obtained, reflecting the relationship between animal and plant agricultural potential. It presents quantitative aspect of the livestock sector.

Average density level of animals throughout the Central Moldavian Plateau UVM/100 is 43.8 meters below the national average (59 UVM/100 ha).

Table 2

The density of animals at 100 hectares of Central Moldavian Plateau – animal/100 ha

Nr. crt.	Commune	Cattle		Swine		Sheep		Poultry	
		Total	Gosp.	Total	Gosp.	Total	Gosp.	Total	Gosp.
1	VASLUI	20,5	20,5	7,6	7,2	8,4	8,4	2,0	1,5
2	BACĂU	31,7	31,7	8,9	8,9	6,9	6,9	1,4	1,4
3	IAȘI	25,6	25,1	10,1	10,1	10,2	10,1	1,9	1,9
4	NEAMȚ	30,3	30,3	8,3	8,3	12,4	12,4	1,6	1,6
	TOTAL	24,2	24,0	8,6	8,4	9,2	9,2	1,8	1,6

In territorial, the degree of animals per 100 ha of agricultural land animals appear very scattered. A brief overview of the density of animal species involved in the formation of this indicator summation show that cattle have a scattered distribution throughout Central Moldavian Plateau, reaching highest densities in the municipalities of Bacau and Neamt, pigs and sheep have a high density in municipalities of Central Moldavian Plateau in Iasi County and the birds have a high density in municipalities of Central Moldavian Plateau of Vaslui and Iasi County. To define the degree of intensification of livestock, along with the quantitative indicator were considered and the following qualitative indicators, such as for example, average yields per animal. [2]

A special part is the practical application of research results in scientific and rational organization of the whole production process. Restructuring and development of livestock

industry in profile and introduction of new technical guidelines should be done to increase economic efficiency. Energy costs determined in future changes in technology and the use of feed resources.

Evolution of livestock in Iasi County, in the period 2006 - 2008 the main groups is based on crop production, which is why from one year to another is making some reductions in animal husbandry

Thus, the species registers 117,710 cattle heads in 2006, because a year later (2007) to increase to 118,281 and then decline in 2008 to 116,783 head, which means that in 2008, compared with 2006 Many breeders have decreased activity. Reduction is recorded and the other species: cows and heifers, swine, sheep, poultry and horses even signs that the owners no longer used for transportation as intense as in 2006.

Table 3

Livestock ownership categories Iasi County (head)

Animal category	2006	2007	2008	% 2008/2006
Cattle total, of which:	117.710	118.281	116.783	99,21
- state	1.829	1.414	1.166	
- private	115.881	116.867	115.617	
Cows and heifers total, of which:	60.414	61.195	58.628	97,04
- state	780	612	488	
- private	59.634	60.583	58.140	
Swine total, of which:	139.161	120.345	117.563	84,47
- state	1.851	1.205	-	
- private	137.310	119.140	117.563	
Sows total, of which:	9.889	9.411	6.074	61,42
- state	121	126	-	
- private	9.768	9.285	6.074	
Sheep total, of which	331.133	325.647	324.457	97,98
- state	780	774	-	
- private	330.353	324.873	324.457	
Horses total, of which	53.385	-	47.810	89,55
- state	202	-	46	
- private	53.183	-	47.774	
Poultry hens	1.855.000	2.090.354	1.738.000	93,69
Bee families	29.418	27.357	24.900	84,64

Table 4

Total production of the main animal products obtained between 2006 – 2008 in agricultural exploitations of Iasi county

Specification	U. M.	Year			% 2008/2006
		2006	2007	2008	
Meat total	tone/alive	48.165	43.194	41.295	185,73
Pork meat	tone	16.672	14.066	14.501	86,97
Cattle meat	tone	11.064	7.083	2.939	26,56
Mutton	tone	3.499	3.705	5.121	146,35
Chicken meat	tone	16.330	18.308	18.734	114,72
Cow milk	thousand hl	1.751,9	1.847,1	1.810,1	103,32
Sheep meat	thousand hl	238,1	118,9	111,4	46,78
Wool	tone	680,9	814	601	88,26
Egg	thousand pieces.	312.056	208.568	191.709	61,43

Analyzing data from Table 4 we observed that it was recorded a significant drop in beef production and the egg. Thus bovine meat production in 2008 is only 26.56% over 2006 and the egg is 61.43% versus the same year.

For some products, such as sheep meat, poultry meat, cow's milk, in Iasi County zoo-technical production increase in 2008 compared with 2006.

The zoo-technical production in Neamt County during 2006-2008, recorded increases in both livestock (Table 5) and livestock production (Table 6), this means ensuring the necessary materials for the food, the beneficiaries being both units in the county, as well as outside it.

Table 5

Livestock from Neamt County

Effectives (thousands head.)	2006	2007	2008
Total Cattle	104,0	104,9	98,1
of which queen	57,8	57,9	52,3
Swine	128,7	132,6	116,9
of which queen	16,0	16,7	15,7
Sheep	188,3	190,6	208,5
of which queen	135,3	139,9	147,9
Goats	9,6	10,1	17,7
of which queen	4,8	5,1	8,4
Poultry	1310	1374	1142
of which queen	1088	1100	1001

Table 6

Animal production in Neamt County

Specification	2006	2007	2008
Meat-total to live	35776	38100	38.765
Cow milk total hl/head	1.705.903 3213	1.710.100 3250	1.700.000 3592
Sheep milk total hl/head	72.437 49	60.300 48	60.300 48
Goat milk total hl/head	4092 70	4000 66	4.920 53
Wool/t	343	390	390
Eggs/thousands piece	127241	150000	148.300
Honey/t	307	360	394

The livestock sector in 2008 shows a decrease in livestock, but because of actions for improvement and selection increase livestock production environments.

In the period 2006-2008 there were set up 49 of the cattle breeders' associations with legal personality, also established the county association of cattle breeders and goat breeders association county.

It was performed in all county municipalities, the mapping herd queen of cattle, sheep and goats.

In 2008 the number of animals increased at the official control of performance in all species within Neamt County. It also increased the number of artificial insemination, from 36.7% to 52.7% (the herd queen).

CONCLUSIONS

The development of intensive agriculture complex is based on the harmonious blending of crop production with animal production. By its specific, intensive animal husbandry is an industry that provides the high-grade feed resources and rational use of labour per unit output. In particular, rural households need to combine harmoniously with the animal crop production to ensure steady revenue and complete use of working time of the family.

The concentration and specialization of production, introduction of modern technologies of farming and animal exploitation provide a high level of economic efficiency. With changes in ownership of agricultural livestock sector goes through a phase of deep changes in terms of farm size and production technologies applied. Placing the sector on new bases require special efforts to preserve and improve the genetic and biological substance of livestock, livestock farms resize the new organizational structure of the private sector. [3]

In order to know and apply new technologies, the farmers need to increase the role of agricultural specialists from municipal centres and consulting offices. It should also develop private forms of organization of animal health protection system, within an institutional system of control and defence of national genetic fund created in the country and territory.

We consider appropriate all the ways to support the livestock farmers to organize such livestock farms: the dairy with minimal effect on farm heads 12-15 (from 36 currently to a total of 270), the sheep – with effect from 200 heads (from 149 to 200 farms), the goats - with flocks of over 200 heads (from 11 to over 30 farms).

The acceleration of the genetic improvement in cattle can be done in the Central Moldavian Plateau through the practice of leading-edge technologies such as artificial insemination and embryo transfer to achieve in the next three years to a rate of 90% from the queen of animals.

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