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STATE AND PRIORITIES OF LIVESTOCK IN PRIVATE HOUSEHOLDS

S. CHILIMAR

Agarian Stat University of Republic Moldova, Member Correspondent of Academy of Sciences Moldova

Corresponding author email: schilimar@rambler.ru

Abstract
We analyzed the situation of livestock in private households in the Republic Moldova. These households have the largest herd of livestock in the country and produce more than two-thirds of overall livestock products. Animal productivity and economic efficiency are at low level. We propose measures to modernize and intensify the livestock sector which will ensure increased productivity of animals, quality and competitiveness of products of animal origin.

Key words**:** *livestock, private households, products, Republic Moldova*

INTRODUCTION

Products of animal origin have an important role in human nutrition. These are social products, important for ensuring food security, including nutrition of children, the elderly and socially vulnerable people. Currently, in the Republic of Moldova the production of animal products is based on animal husbandry in the private sector. For these reasons, we carried out a statistical analysis of the situation of the population in the livestock sector, based on a sample of 2332 households that had agricultural land of an area of less than 10 ha. From the analysis of the results of these investigations we determined the need for measures to increase the production of products of animal origin.

MATERIAL AND METHOD

In the research we used information on households regarding sown areas, their structure, livestock, agricultural production volume, revenues from the sale of agricultural production. Research results also contain data on some households that individually process land, produce and sell food and raw materials for processing (case study).
Proposals to modernize and increase production of animal products were developed using the results of research conducted by the Academy of Science, the Agricultural University, and scientific research institutions.
The research was based on applying statistical and mathematical methods to determine the population of households and peasants to be included in the study (sample) data processing and inference of obtained data for the totality of households; obtaining data from households through investigations by interviews, with especially employed and interviewers; documentation (records) conducted systematically in the researched subject households.

RESULTS AND DISCUSSIONS

We carried out statistical studies of agricultural activities of personal, auxiliary households of citizens, occupied with raising livestock and poultry breeding and horticulture on lots of the house and gardens, which are situated both in the city and near the locality in question. The information can be found in the tables no.1-5.
The ultimate goal of the research is to obtain complex and authentic information on the activity in the category named by agricultural producers, including the sector of land, livestock and poultry, volume of production obtained, size and structure of costs and expenditure on the agricultural production structure, the use of agricultural production and income from agricultural activity.

Table 1. Livestock in all categories of producer, as of January 1, on thousand heads

	Year				On an average	Year				On an average
	2004	2005	2006	2007	2004 -2007	2008	2009	2010	2011	2008 - 2011
Cattle	373	331	311	299	328	232	218	222	216	222
of which, cows	256	231	217	207	228	169	160	161	154	161
Pigs	446	298	461	532	459	299	284	377	478	360
Sheep and goats	938	942	938	947	941	853	866	915	905	885

Table 2. The number of livestock per 100 households to rural, from 1 January

	Year				On an average 2004-2007	Year				On an average 2008-2011
	2004	2005	2006	2007		2008	2009	2010	2011	
Cattle	40	36	34	33	36	26	24	25	25	25
of which, cows	28	26	25	24	26	20	19	19	18	19
Pigs	44	40	47	53	46	27	25	33	40	31
Sheep and goats	99	102	103	104	102	93	96	102	102	98

Table 3. Production of main animal products in households, *total, thousand tones*

Production	Year				On an average 2003 -2006	Year				On an average 2007 – 2010
	2003	2004	2005	2006		2007	2008	2009	2010	
Meat *(in live weight)*	108	109	109	117	111	129	83	93	111	104
Milk	564	604	634	604	602	585	527	559	576	562
Eggs, *thousand pcs.*	406	443	478	479	452	465	356	392	442	414

Table 4. Livestock productivity in agricultural enterprises, kilograms

Production	Year				On an average 2003 -2006	Year				On an average 2007 – 2010
	2003	2004	2005	2006		2007	2008	2009	2010	
Average annual milk yield calculated per one cow	2493	2561	3018	2913	2746	2710	2743	3098	2993	2886
Average daily overweight, g: - cattle	262	275	321	323	295	297	325	378	348	337
Average daily overweight, g: - pigs	136	166	187	200	172	218	268	311	315	278

Table 5. Level of profitableness (unprofitableness) of production sold by agricultural enterprises, percentage

Production	Year				On an average 2003 -2006	Year				On an average 2007 – 2010
	2003	2004	2005	2006		2007	2008	2009	2010	
Animal production, on an average	-8,6	7,4	25,0	20,1	11,0	-3,0	18,4	21,4	20,7	14,4
Cattle and poultry for slaughter (in live weight), on an average	-35,1	-19,2	1,8	4,0	-12,0	-14,8	15,3	17,4	19,9	9,5
Including: cattle	-47,9	-43,8	-23,8	-26,8	-35,6	-41,2	-20,9	-19,6	-39,9	-30,4
pigs	-39,0	-30,0	-7,7	-4,5	-20,3	-12,8	25,2	25,4	34,4	18,2
sheep and goats	-26,6	-20,8	-32,2	-22,0	-25,4	-44,1	-44,1	-36,8	-34,5	-39,9
poultry	-9,0	12,8	20,3	15,7	10,0	0,2	17,1	16,2	16,1	12,4
Milk	-3,3	0,4	9,9	10,4	4,4	0,5	-1,4	8,5	13,7	5,4
Eggs	17,3	31,8	50,8	50,7	37,7	10,6	36,9	34,3	27,9	27,4

Small-sized agricultural producers - this category of producers includes personal auxiliary households, peasant farms (farms) with land lots up to 10 ha, registered in the established way, and people who have received the trading sectors of land equivalent, but have not registered its household in the established manner.

Auxiliary personal households of citizens – the form of agricultural production through the work carried out by the members of their households (lots to House and gardens) in order to satisfy the needs for food and other needs.

Farms – the shape of entrepreneurship activity carried out on the basis of land use and heritage privately owned or used by the farmer in dealing with the production, processing and sale of agricultural production.

Of all the agricultural lands of the Republic of Moldova, farms represent 30 %, lands with a medium surface of land area less than 10 ha 25.9%, and about 14% are in possession of auxiliary households (lots in addition to homes and gardens).

The majority of private sector households (65.3%) does not have a specific specialization and produce several types of agricultural products. Specialized in the manufacture of cereal farms are only 22.7%, 7.8% in the production of grapes. There are no specialized households in the production of animal products. In the structure of sown areas, fodder plants represent less than 5%.

Of the total agricultural production, private households produce 26-34% of cereals, 21-28 % soy, 40-45% of grape, 28-38 of fruit, 24-25 % of sun flower production.

Average harvest in tons per 1 ha is 2, 5 - 3, 2 t grain, 1, 6 - 2, 2 t soy, 4, 0 - 4, 4 t grapes. In the private sector are raised 94% of cattle, including 97% of cows, 75% of pigs, and 98% of sheep, goats and equine from all livestock in the country. The number of livestock per 100 households to rural population constitutes 25 cattle, inclusive 19 cows, pigs 31 and 98 sheep and goats.

On average for 2007-2009 in all categories of farms were produced 132 thousand tons in live weight of meat of species of animals and birds; 579 thousand tons of milk and 656 thousand eggs in the respective households; 104 thousand tons of meat, 562 thousand tons of milk and 414 thousand eggs. The average annual milk yield per cow in agricultural enterprises was 2886 kg; the addition of average daily weight gain in cattle was 337 g, for pigs 278 g.

The level of profitability of production sold by agricultural enterprises on average for 2007-2010 was at 18.2% for pork meat, 12.4% for poultry meat, 27.4% for eggs and 5.4% for milk. Production of beef, ovine and sheep meat was with loss of 30.4-39.9%.

From the analysis presented we can conclude that in private households producing products of animal origin requires the development and implementation of measures that would ensure the modernization and enhancement of this activity in order to increase the income of the rural population and to produce competitive products on domestic and foreign markets.

A broad analysis of the sector for the production and processing of milk in Moldova reveals the following:

• Cow herds are in permanent decline;

• 97% of cow herds are kept in rural households by the population (peasant homes);

• The health and ecological situation in rural areas of the country has deteriorated;

• Milk produced in private households is a seasonal produce and of lower quality, making it difficult to ensure the capacity of processing raw material during autumn and winter, as well as manufacturing by processing enterprises of competitive and quality production;

• Capacities of processing companies are used in an average 22.6%.

The situation can be further improved by the gradual passage of flocks of cattle from the homes of citizens to outside the village, by revitalizing and modernizing existing facilities and by construction of new modern installations.

Of the most important measures we mention the following.

The elaboration and implementation of a strategy for the development of the livestock sector in the long and in the middle term of all the categories of households according to the strategy of the production and processing of milk.

The strategy requires ensuring conservation and diversification of the genetic fund of cattle, sheep and goats. To grant special support to invest in the livestock sector development for the creation of race farms with the use of global genetic resources in animal husbandry and increase the share of farm-bred animals up to 25-30% of the reproduction population of cattle, sheep and goats.

Increase of the volume of financing for scientific research in order to develop and implement the new breeds, lines and populations of livestock production and improved quality of adaptation to local conditions of animal welfare.

The encouragement of livestock producers to implement the achievements of science and technology for the creation of new facilities and to upgrade existing ones in order to enhance the effectiveness of the production of products of animal origin.

CONCLUSIONS

In the middle and long-term the goal is not to increase the number of animals, but substantial gains by improving yields, improvement of breeds and rearing technologies and exploitation of farm animals. Classical systems of food production are less able to cover all the needs of food of animal origin, being replaced by intensive methods and technologies of production, based on the conquests of science and the achievements of modern agricultural equipment.

It is necessary that in the Republic Moldova the practice of growth and exploitation of animals acquired in economically developed countries should be more and more of an industrial character, to implement means of mechanized work and even automated technologies for breeding, feeding and maintenance at the same time, using biological and increasingly more valuable material.

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