LIVESTOCK - MAJOR GOAL IN CONSOLIDATION AND EFFICIENCY OF AGRICULTURAL UNITS (CASE STUDY AT S.A. „AGROIND" BEREZENI, VASLUI COUNTY)

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Abstract
Economic efficiency of livestock farms is directly influenced by many factors among which their dimension.
Ensuring economic efficiency of farms is a major objective in developing strategies in agriculture, in which livestock is an essential factor.
From these aspects the authors have proposed to highlight the role of livestock in strengthening and improving agricultural units, based on a case study conducted at Agricultural Society „AGROIND" Berezeni, Vaslui County.
Key words: **economic efficiency, strategies, livestock units**

Agricultural production structure is found at all levels of economy: *macroeconomic mezoeconomic and microeconomic.*

Whatever level is approached, **the concept of production structure** refers to production sectors, the links between them, and the proportions are developed [Timariu Gh., 2001, Valorosi F., 2002].

Production structure is a system that may include the following activities: *culture structure, livestock structure, technological structure, ownership, land structure, the dimensional structure of agricultural holdings, consumption structure, down to the structure of varieties, breeds and hybrids* [Roux P., 1986, Samochiș B. *et. al*, 1997].

Production structure can be regarded as a combination of multiple choices; the answer to this combination will be reflected in efficiency.

The variants of production structure that can develop due to this combination are multiple, due to actual conditions variability, conditions to be set off by the structure process [Chiran A., Gîndu Elena, 2000, Leonte Marie - Jaqueline, Bălănică S.,1998, Voicu R., Dobre Iuliana, 2003].

Therefore, the structure of production involves the selection of agricultural activities as a branch of national economy and the various types of agricultural units.

It includes a diverse number of branches to form a structure with different levels of intensity: *plant branches have, except vegetables, extensive character and **animal production** is characterized by an intensive type structure.*

We can have **an intensive structure, given by the largest share of animal production in gross value added** or **an extensively structure, in which crop production is predominant, especially grain production** [Crăciun A., 1995, Chiran A. *et. al*., 2000, Davidovici I., 1993, Ștefan Marcela, Tănăsescu Rodica *et. al*., 1997]**.**

One of the indicators for determine the proportions of branches in the production structure is **"gross added value"**, which recorded the following shares in plant and animal production in the example of several countries in Western Europe (*tab. 1).*

The gaps between Romania and the agriculture of developed countries are large, they depend on general level of economic development and the differences between agricultural structures *(ownership structures, production structures, structures of economic organization, farm size, the structure of factors of production used, the structure of agricultural production services, the structure of production and especially applied technologies, marketing structures, financing structures and agricultural support systems, social protection systems, etc.)* [Bold I., Gheorghe P., 2001, Zahiu Letiția *et. al*., 2003].

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Table 1

Gross added value by branches - %

The country	Vegetal production	Animal production
France	49.1	50.9
Italy	60.6	39.4
Germany	38.0	62.0
Belgium	39.5	60.5
Spain	57.8	42.2
Netherlands	44.2	55.8
Romania	62.9	37.1

Source: *L'Observateur de l'OCDE, Edition 1996*

Thus, **the average of the two main branches of agriculture (crop and livestock),** in the value of agricultural production reveals a development of agriculture. Not until 1990 the share of animal production was not at the crop level, representing only 47% of total agricultural production, but in 1997 reached 37.1%, due to drastic reduction of livestock after 1989. Thus, the published data shows that from 1989 until now, the number of cattle fell by over 55%, pigs by over 2/3, over 62% sheep and poultry by 70%.

European Commission EEC recommended since 1950, the size of commercial farms to be over 60 hectares for field crops, or 30-50 cows, 150-200 fattening cattle, 450-600 pigs, etc.

MATERIAL AND METODS

The case study has been conducted at S.A. AGROIND Berezeni, Vaslui County and aimed to highlight role of changing the structure of livestock production and increase economic efficiency. The study period was 20 years (1992-2011), with reference points in 1992, 2002 and 2011.

RESULTS AND DISCUSSION

Livestock at S.A. AGROIND Berezeni, Vaslui County, except pigs and horses, had an increasing evolution (*tab. 2).* Thus, compared with 1992, in 2011, the numbers of cattle growth registered an increase of 100 head (+ 41.7%), the dairy cows reached 172 head (72.0%) and young cattle increased by 20.0%, etc. The unit gave up at breeding and fattening pigs and horses.

Table 2

Evolution of livestock during 1992-2011 (heads)

Species or category of animal	1992	2002	2011	2011 % against 1992
Cattle - total, of which:	240	280	340	141.7
- cows and heifers	100	120	172	172.0
- young cattle	140	160	168	120.0
Pigs - total	41	43	-	-
Sheep - total	1200	1200	1100	91.7
Horses - total	37	10	-	-

In the 20 years of existence, in livestock farming, the unit was profiled on growth dairy cows (in closed circuit) and sheep so that we assist in obtaining additional revenue from the sale of animal products: *cow milk, sheep milk, wool, beef in live, sheep meat in live (tab. 3).*

The total production realized and incomes were higher than 1992. The highest increases were recorded in live beef (+ 500.6%), sheep in live (+ 45.8%) and cow milk (+ 34.8%).

Total income increased very significantly to 6.5 times higher than in 1992, with obvious differences in product categories: 21.3 times (maximum) - in live beef and 257.9% (minimum) - from sheep milk.

In terms of economic efficiency in the analyzed period, animal products obtained in S. A. AGROIND Berezeni was profitable, with differences in products and in time *(tab. 4).*

In the structure of gross profit derived from livestock, in 1992, the largest share (76.8%) held the milk cow, followed by wool and sheep's milk, while meat production in live (cattle and sheep) had a reduced contribution (7.1%.), which shows that the unit had a production structure that held a majority share of crop production.

Table 3

Evolution of the total production and livestock income during 1992-2011

The product	U.M.	1992	2002	2011	%/1992
Cow milk	hl	4600	4900	6200	134.8
	thousands lei	105.8	254.8	713.0	673.9
Sheep milk	hl	151	163	151	100.0
	thousands lei	7.6	12.7	19.6	257.9
Beef in live	Kg	2495	7496	14985	600.6
	thousands lei	3.24	14.99	68.93	2127.5
Sheep meat in live	Kg	4627	4120	6745	145.8
	thousands lei	12.96	18.54	67.45	520.4
Greasy wool	Kg	5040	5400	5170	102.6
	thousands lei	7.56	10.26	20.68	273.5
Total income	thousands lei	137.16	311.29	889.66	648.6

Table 4

Evolution of gross profit on products of animal origin obtained at S.A. AGROIND Berezeni, during 1992 – 2011

The product	U.M.	1992	2002	2011	%/1992
GROSS PROFIT – TOTAL					
Total animal products of which:	thousands lei	29.96	70.21	101.69	339.4
Cow milk	thousands lei	23.0	58.8	62.0	269.6
	% of total profit	76.8	83.8	61.0	-
Sheep milk	thousands lei	2.3	2.9	1.5	65.2
	% of total profit	7.7	4.1	1.5	-
Beef in live	thousands lei	0.75	3.75	23.98	32
	% of total profit	2.5	5.4	23.6	-
Sheep meat in live	thousands lei	1.39	2.06	12.14	873.4
	% of total profit	4.6	2.9	11.9	-
Greasy wool	thousands lei	2.52	2.7	2.07	82.1
	% of total profit	8.4	3.8	2.0	-

The evolution demonstrates that the unit was concerned for livestock development, acting mainly on performance, with a tendency to align to countries with developed animal husbandry, in which livestock are an important part of agricultural production.

Currently, even if there was a clear increase in revenues from livestock, the share of agricultural production structure is still low due to the fact that the unit recovered animal products as raw material without investing for the milk (milk processing unit is in conservation – due to unfulfilled rules imposed by European standards) or meat. In the future, etc. S.A. AGROIND Berezeni, Vaslui County should be concerned for development of livestock, including pigs growth and to direct investment in processing units and recovery of finite products of animal origin.

CONCLUSIONS

S.A. AGROIND Berezeni is one of the key units of Vaslui County, with an activity beyond 20 years of existence.

Livestock had an increasing trend, except for pigs and horses, which the unit gave up to.

Total production (milk, meat, wool) and recorded incomes were growing, the biggest increases realizing in cow's milk.

Significant are also the total revenue from the sale of products, provided that the unit has yet to invest for the design of processing units for milk and meat, for the recovery of finite products of animal origin, incorporating high added value.

In terms of economic efficiency, even when the unit capitalize the production as raw material (milk, meat, wool), it was found an appropriate level of gross profit, with a rate of return, which in some years reached nearly 30%.

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