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## **THE LIVESTOCK SECTOR INFLUENCE ON THE AGRICULTURAL ENTERPRISES' ECONOMIC PERFORMANCE**

The livestock sector is in a crisis marked by a sharp decrease in the volume and production efficiency, a steady decrease in the number of animals, increased feed prices and the necessary materials, falling consumer purchasing power. One of the ways to combat the unprofitability of the industry is to optimize the industrial structure of the enterprise, taking into account all the benefits that specialization provides. The influence of the specialization of agricultural enterprises with the structure of the livestock sector on the efficiency of their production has been investigated. The criteria of efficiency are the level of profitability of production and the profit received by the enterprise for 1 hectare of land. It was found that even a high level of specialization does not allow taking advantage of its advantages at a high specific weight of the animal husbandry sector. The ways of raising the economic efficiency of livestock production are proposed.

**Keywords:** animal husbandry, specialization, production efficiency, profitability, profitableness.

**Formulation of the problem.** The main problem of the entire livestock industry is the profitability of production. Even if the situation on the market of agricultural products improves, the sale of livestock products is not always advantageous for the commodity producer; it negatively affects the efficiency of the economy as a whole. There is an assertion that producing grain and sunflower for sale even at low yields is much easier and more profitable than feeding cattle.

**Analysis of recent research and publications.** Many scientific studies of well-known scholars-economists S.P. Azizov, V.G. Andriyчук, O.M. Borodina, A.D. Dibrov, S.M. Kvasha, P.T. Sabluk, N.V. Stativka, O.M. Schischak and others devoted to the problem of the development of the animal husbandry sector in agriculture in Ukraine. Taking into account the specificity of the industry and its crisis situation, an actual analysis of the reasons for such a situation and the search for ways to overcome it are relevant.

The reason for such a sharp decline in the volume and efficiency of livestock production is the mistakes, the disadvantages are admitted both at the macro and micro levels. Many issues of stabilization and raising the efficiency of livestock breeding (reproduction and conservation of livestock, raising animal productivity, reducing production costs per output unit, improving product quality and increasing the profitability of the industry) should be addressed at the micro level, i.e. in enterprises based on the rational organization of each industry, in accordance with the zonal placement, specialization and their specific features<sup>1</sup>.

It was found that the increase in the share of livestock in farms increases the level of land use, but the indicators of the production profitability level decrease, despite the fact that with a decrease livestock production, the level of loss-making is significantly reduced. The main reason is that the branch of plant growing is much more profitable and an increase in its share determines the overall profitability of production.

There is a contradiction: on the one hand, it is necessary to increase the production of livestock products, on the other hand, it causes deterioration in the financial condition of producers<sup>2</sup>.

**Setting objectives.** Identify the impact of the level of specialization of the agricultural enterprise, which is the livestock sector, the level of profitability and profitableness.

**Presentation of the main research material.** In recent years, the share of livestock production across the agricultural enterprises in Ukraine has decreased from 41% in 1990 to 24% in 2017, a similar

<sup>1</sup> Азізов, С.П. (2011) Деякі питання організації та підвищення ефективності тваринництва. *Економіка АПК*, 4, 12-15.

<sup>2</sup> Статівка, Н.В. (2002). Вплив галузевої структури сільгосп підприємств на ефективність виробництва. *Вісник Харківського державного аграрного університету*, 7, 120-126.

pattern is observed in Kharkiv region (Table 1). This leads to higher prices for livestock products, reduced consumption of its population, poses a real threat to the country's food security.

At the same time, there is a problem of ensuring a hygienic balance of humus in the ground. As a result of irrational use of agricultural land, the humus content in the soil decreases. To restore it, it is necessary to add an organic substance, the main component of which is manure. Therefore, the task of ensuring the lack of deficit humus in the soil cannot be solved without increasing manure production, and hence the number of animals. For the normal course of humus formation in the soil for farms of the Left Bank Forest-steppe Ukraine it is necessary to have 60-65 conditional heads per 100 hectares of land for cultivation. As the stock of humus increases in the soil, the yield of crops will increase, and hence the volume of their implementation.

Table 1

**The livestock production share dynamics in the total volume of agricultural enterprises of Ukraine and Kharkiv region in 1990-2017, %**

	Years						
	1990	1995	2000	2005	2010	2015	2017
Ukraine	41	32.3	20.8	28.1	29	28.5	24
Kharkiv region	41	30	20.6	28.4	30	28.3	23.6

One of the real ways of solving this problem is to optimize the sectorial structure of the enterprise, that is, to establish an optimal balance between plant growing and livestock production.

It is known that increasing the level of specialization of the economy allows you to achieve higher productivity, improve product quality, production efficiency and profitability of the enterprise<sup>1</sup>. We investigated the impact of the specialization of agricultural enterprises, having in their structure livestock industry, on the efficiency of their production. The criteria of efficiency are the level of profitability of production and the profit received by the enterprise for 1 hectare of land. In order to detect the influence of the livestock industry on the production efficiency, the results of activity in 2017 were processed by about 200 enterprises of the Kharkiv region (Tabl.2), which were divided into 3 groups:

- I – enterprises with the less than 20% livestock sector in the production structure.
- II – enterprises with the ranging from 20% to 50% livestock sector in the production structure.
- III – enterprises with the more than 50% livestock sector in the production structure.

Table 2

**Dependence of production efficiency on the level of specialization for enterprises with different share of livestock sector**

Performance Indicators	Coefficient of specialization									
	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
I group – enterprises with a specific weight of livestock breeding up to 20%										
Profitability level, %	52	39.8	37.4	40	51.6	68	80	-	-	
Profit on 1 hectare, thousand UAH	5.1	4.0	3.8	4.2	5.3	7.4	11.2	-	-	
II group – enterprises with a specific weight of livestock breeding 20- 50%										
Profitability level, %	29.8	33.2	39.1	40	40.3	39.9	38.6	30.4	26.2	
Profit on 1 hectare, thousand UAH	3.6	4.0	4.1	4.6	4.7	4.7	4.5	4.3	3.9	
III group – enterprises with a specific weight of livestock more 50%										
Profitability level, %	-	41	36.1	28.4	22.1	17.8	11.0	7.5	-4.3	
Profit on 1 hectare, thousand UAH	-	2.2	4.4	5.8	6.4	6.3	5.0	3.1	-1.2	

<sup>1</sup> Ковальова, Г.В. (2008). Методика оцінки економічної ефективності і виробництва продукції тваринництва. *Вісник Львівського національного аграрного університету*, 15, 196-203.

With a small proportion of livestock production in the company's products (Group I, up to 20%) with a low level of specialization, the performance indicators are somewhat reduced, reaching the minimum value with a coefficient of specialization close to 0.4, then sharply increase with an increase in the level of specialization. This is explained by the fact that, with a small proportion of livestock production in the total volume, the influence of profitable crop production is increasing.

For enterprises with an average specific weight of livestock products (20-50%) (Group II), the indicators of production efficiency with a change in the level of specialization are changing more slowly: the profitability within 10%, profit within 1 thousand UAH. It is possible to see some optimum with the coefficient of specialization close to 0.6. It is obvious that with such a fate of livestock production in an enterprise, the influence of branches of crop and livestock production on the production efficiency is approximately the same.

In the 3rd group of enterprises, where animal husbandry accounts for more than half of production, the level of profitability with deepening of specialization is almost linearly decreasing, because an increase in the share of livestock in the sectorial structure of the enterprise invariably leads to a decrease in the level of profitability. Somewhat more difficult in this group is the profit per hectare of land, it is optimal with a coefficient of specialization 0.6, decreasing at lower and higher levels of specialization. In principle, in this group livestock breeding should be profitable, but the payback in these farms was significantly lower than in crop production, which led to negative results.

Unfortunately, we have to admit that even a high level of specialization does not allow us to take advantage of it with a high specific weight of the animal husbandry sector.

According to the principles of the world market and world standards, livestock products must be high-quality, competitive and accessible to consumers<sup>1</sup>. This implies a policy of protectionism and the protection of the domestic producer from imported livestock products, the introduction of innovations and the achievements of scientific and technological progress, the provision of national food security, the growth of employment, the growth of the competitive advantages of enterprises and regions, which have prospects for efficient development of the livestock sector.

Taking into account the strategic importance of livestock products for the country's food security, on the one hand, and the benefits of specialization from the other, it is necessary to identify ways to increase its production efficiency<sup>2</sup>.

In terms of enterprise capabilities, it is necessary to:

1. To increase the volume of production and sales of products: increasing the density of livestock; increase in animal productivity; providing animals with a rationally balanced diet; improvement of the structure of commodity products.
2. Reduce the cost of production: cost savings; lowering the cost of feed; the mechanization of production processes and the introduction of new technologies; economy, fuel, electricity, water supply.
3. To raise the quality of products: carrying out breeding and breeding work; application of stimulation of production of quality products; introduction of new advanced technologies; keeping the right rearing and fattening of animals.

An important factor in raising the efficiency of livestock farming is financial support from the state, which has become lucid in recent times. The Government of Ukraine adopted a resolution on ensuring the direction of state support in 2019 for the development of the livestock sector, stabilizing livestock and improving its genetic potential, stimulating the increase in livestock production, fish farming, and attracting investment in the creation of capacities for the storage and processing of agricultural products, it is very important to create conditions for a profitable sale of products by the state.

**Conclusion.** Studies have shown that, in modern agriculture, the livestock industry is often unprofitable. One of the ways to increase the efficiency of the industry is the optimal balance between plant growing and livestock production, with the benefits that provide the level of specialization of the enterprise.

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<sup>1</sup> Скабаль, В.І. (2014). Функціонування та тенденції розвитку галузей тваринництва в регіонах. *Економічний аналіз*, 18, 3, 75-80.

<sup>2</sup> Гадзало, Я.М., Башенко, М.І., Гладій, М.В. та інші (2017). *Тваринництво України: стан, проблеми, шляхи розвитку (1990 – 2017 – 2030 рр.)*. Київ: Аграрна наука, 160.

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