UDC 631,145

TECHNICAL AND TECHNOLOGICAL SUPPORT TVARYNNYTSTVAV CURRENT CONDITIONS

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The results of the analysis of the current state of the livestock industry and outlined promising areas of its technical and technological support.

Livestock, machinery, technology, organic production, processing, training.

Formulation of the problem. Today, humanity faced several problems. These include food, energy and the environment, the solution of which requires the most effective balance of food, raw materials and energy needs with the capabilities of agro-ecosystems. Integrated solution to these problems is to overcome the contradictions, the essence of which is that the increase in food production or energy production and consumption leads to disruption of the ecological balance and the deterioration of the environment. Recently, increasing crop yields provided by the use of new varieties and the wide use of chemical fertilizers, pesticides, herbicides, growth stimulants, increasing the intensity of cultivation. This leads to a drop in soil fertility and requires periodic review and increase the standard values of indicators characterizing food safety. Experience shows that natural high quality products can be obtained without the use of synthetic substances while maintaining soil fertility, but in this case reserves to increase production is limited, which may conflict with the needs in agricultural products. Therefore the problem of production of quality and safe for human food in sufficient quantity to meet the needs of the population while playing soil fertility, as well as technical and technological support to solve it is important for the agricultural production.

Analysis of recent research. It is well known that the technical support of agricultural production, which includes amortization expense - statutory deduction of the cost of buildings, machinery and equipment, the cost of fuel, lubricants

materials, electricity, fuel and energy, as well as spare parts, repairs and building materials to repair with current trends in higher prices for fuel and lubricants, holds in total expenditures on agricultural production 22.3% Plant alone - 25 2% and for livestock - 14.6% [1].

Nowadays the technology becomes more complex (robotics

manufacturing operations, GPS monitoring and control units, etc.). There is a growing range of machines and by the introduction of new technologies. Simultaneously, the physical and moral aging machine-tractor fleet, resulting in significant losses. Serious impact on agricultural production have implications price increase of motor fuel (diesel fuel price increase to 1 USD / kg results in additional costs of up to 2.0 bln. USD). This leads to the development of energy-saving technologies and related techniques, the use of alternative motor fuels, the introduction of processing raw materials locally, optimizing infrastructure and transport services. These innovative changes provide additional profitability of agricultural production[2, 3].

As for the livestock industry, which is currently rising trend, it is necessary to conduct further research towards the definition and analysis of future development on the basis of technical and technological support sector based on solving scientific and engineering problems.

The purpose of research. analyze the state of livestock production and to identify ways to further improve its technical and technological support.

Results. The analysis shows that in today's agriculture developed in two main areas. The first - a large-scale grain production using predefined rules fertilizers, pesticides and a complete set of genetically modified crops. Experience shows that in financial terms, this gives the greatest effect, as the number of hungry people in the world is increasing, and therefore the demand for resulting in intensive farming systems is not reduced.

It also noted the expediency of technical and technological support energy autonomy of agricultural production based on biofuels for compensation of losses from the appreciation of traditional fossil fuels.

Statistical data (Fig. 1) changes in cattle and poultry in recent years indicate a stabilization of the number of cows in farms and households in rural areas. Thus the number of cows on farms in rural areas compared with 1990 virtually unchanged and stands at about 2 million. Heads, while the number of cows on farms during this time period decreased by about an order. As pigs in farms and the farms of rural population stabilized at about 4 mln. Heads. With regard to poultry farms, it was resumed in comparison with 1990 at 132-133 million. Ch. Consistently high (at around 100 million. Ch.) Is the number of poultry farms. Head of horses for independence Ukraine agricultural enterprises decreased 35 times, and households grew by 10 times, which indirectly indicates the level of use horses for work in agricultural enterprises and farms.

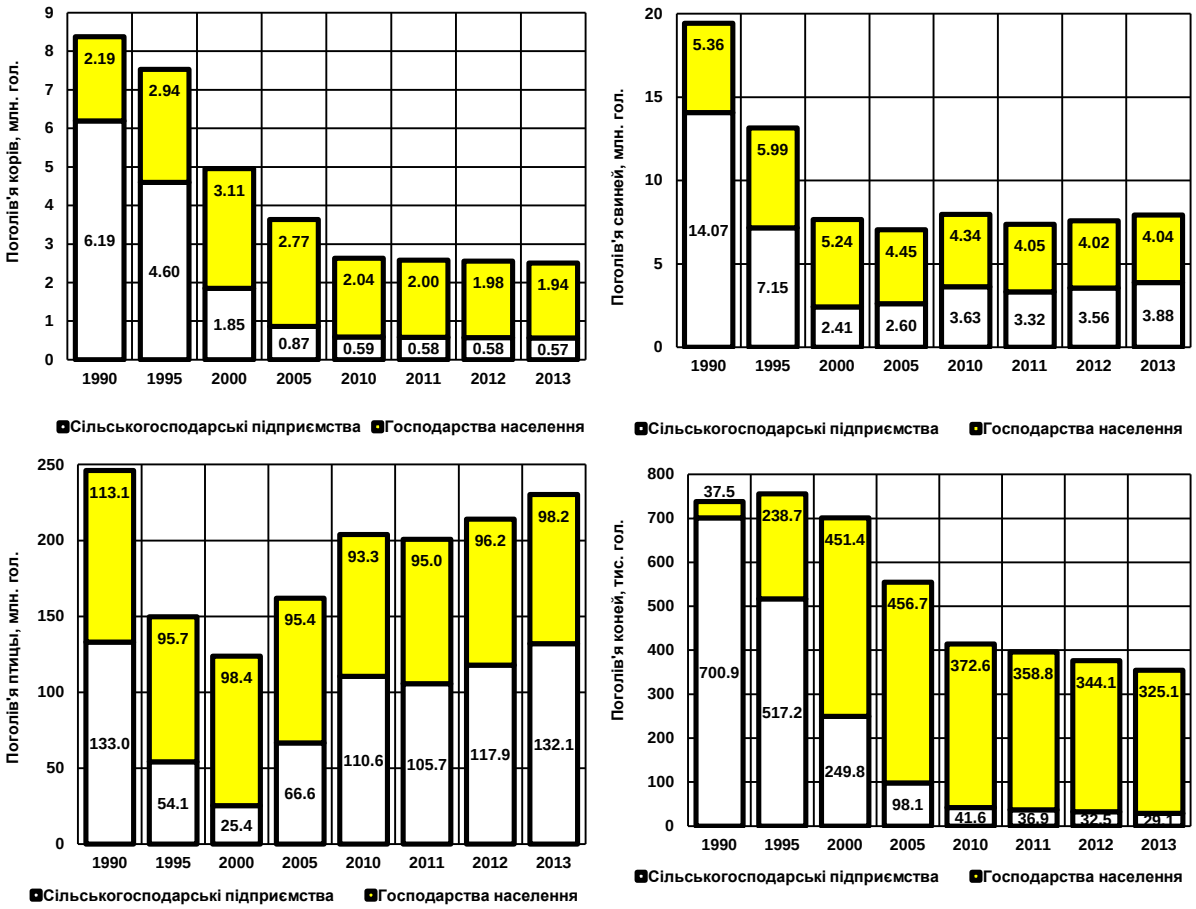

Fig. 1. Dynamics of cattle and poultry in recent years.

The analysis of livestock production (Fig. 2) shows that the production of eggs and wool in Ukraine has increased slightly, and meat and milk decreased approximately twice. Relationship between egg production in agricultural enterprises and farms of rural population virtually unchanged, while production of wool is practically concentrated in households. Production of meat households remains almost at the level of 1 mln. Tons. At the same time, meat production in farms is growing. Currently milk production in agricultural enterprises and farms has stabilized, and the ratio of the volume of production is about 1 to 3 in favor of households.

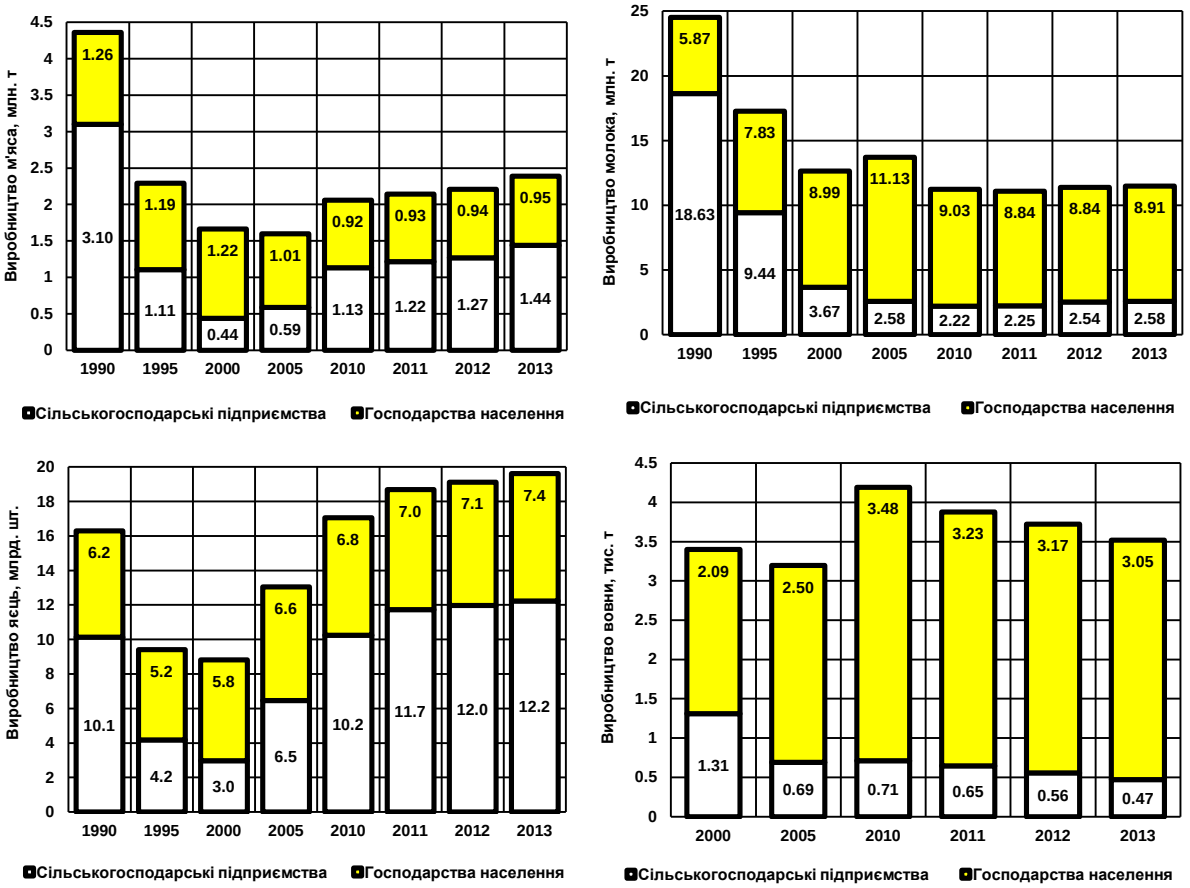

Fig. 2. Dynamics of livestock production in recent years.

When selecting areas of technical and technological support livestock should also pay attention to the group of enterprises by number of livestock (Table. 1). As can be seen from Table. 1 Number of farms with livestock of cows to 200 score. is about 70%, and farms - by 90%.

Efficiency in livestock decisive depends on forage production, namely efficient harvesting and use of feed resources. In the structure of production costs of livestock, for example, in 2012, feed costs accounted for 55.1% in 2013 – 57.5%.

1. Grouping largest companies the number of cows at the end of 2013.

Livestock, ch.	Number:		of these farmers	
	units	%	units	%
5	398	12.4	250	30.2
6 - 20	527	16.5	199	24.0
21 - 49	369	11.6	150	18.2
50 - 99	388	12.1	103	12.4
100 - 199	564	17.6	70	8.5
Total	2246	70.2	772	93.3
200 - 299	356	11.1	33	4.0
300 - 399	200	6.2	8	1.0

400 - 499	114	3.6	5	0.6
500 - 999	228	7.1	8	1.0
More than 999	57	1.8	1	0.1
Total	3201	100	827	100

Our analysis of nutritional feed from crop rotation in 2013 (82.7% of acreage) showed (Fig. 3)That the greatest nutritional value of feed units can be obtained by growing corn - 8333 correspondent. units. / ha.

Fig. 3. Analysis of the nutritional value of forage-based crop rotation in 2013

A major foundation fodder livestock are also annual and perennial grass (haylage and hay) because they can not be effective without the crop in terms of maintaining soil fertility, although their share in the structure of rotation of only 5.7%.

In Ukraine, there is every reason to produce a sufficient amount of concentrated feed, as crops that are the basis for this production is grown in large quantities (31.1% of acreage). Milk production is impossible without silage, but the structure of crop rotation, in our view, corn silage grown enough, only 1.4% of farmland.

It should also pay attention to food processing oilseeds (FUS and meal), since these crops are taking an increasing part in the structure of crop rotation - 17.8% 3.6% sunflower and rapeseed. Regarding production monokormu, it requires significant energy costs for the drying process, and therefore its use in the energy crisis is inappropriate.

According to many research and manufacturing experience, feeding full sumishkamy compared with separate feeding feed eating by

increasing the level of concentrated feed by 10-15% and roughage in half and improve digestion of feed by 5-7%, can raise production livestock production by 15-20%. The EU and US sumishkah fed from 75 to 96% of the feed, while in Ukraine the opposite.

In modern conditions when livestock sector after the recession during 2000-2007 Years shows profitability growth (7.8% in 2010, 13% in 2011, 14.3% in 2012 and 11.3% in 2013), its development must provide:

– modernization of existing farms with the introduction of environmentally sound production of animal products as opposed to the construction of large facilities that require significant investment and threaten contamination of one of the main resources of nature - soil water;

– Farm equipment modern biogas plant and composting areas for mechanized manure and litter that will provide a given amount of production of organic fertilizers for crop production;

– development and use of biofuels to enhance energy autonomy livestock industry through the production and use of biodiesel (bioethanol production in necessary volumes can provide processing industry) and the use of straw for heating purposes.

The development of the processing of livestock products most appropriate to implement in terms of agricultural production. In the present context such processing can be achieved with the standards of product quality. The level of processing of products in terms of agricultural production should be carried out not only on the basis of economic feasibility, but also the social value of this production. The level of quality products that provide large processing factories in the cities we have experienced to the full, making sure in its day low.

Formation of technical and technological support livestock also impossible without staffing, depending on quality training of engineers,possessing broad scientific-technical and humanitarian minded, capable of solving complex problems of scientific and technological progress.

Training engineers should be directed to the ability to perceive and creatively to realize a comprehensive, rapidly growing scientific, technical and socio-economic information to identify the nature and processes of vector engineering.

Professional training of engineers is a complex social and educational system that is aimed at the formation of the future expert so that he could organize their further professional development and improvement.

Complexity of training professionals need possession mathematical apparatus substantially repels school leavers from entering the

engineering profession. In this regard, there is need to create mechanisms to improve the social status of the engineer in society.

Conclusion. Analysis the state of livestock production and the ways of further improving its technical and technological support will help increase the production of environmentally safe products, will provide an increase in production of organic fertilizer for crop production and help increase the level of energy autonomy livestock industry through the production and use of biofuels.

WITHshut literature

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Animal husbandry, technics, technology, production of orhanycheskoe, REFINING, Preparation personnel.

Results of analysis of the current state of the livestock industry and is scheduled to promising areas of its technical and technological support are given.

Livestock, machinery, technology, organic production, processing, personnel training.

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PROSPECTS AND TECHNICAL AND TECHNOLOGICAL SUPPORT UKRAINE DAIRY FARMING SECTOR

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