MEAT PRODUCTION IN UKRAINE: THE STATE AND TENDENCIES

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The paper analyzes the current state of cattle breeding in Ukraine. Indicate the nature of his recovery. Investigate trends in the context of the relevant industries. Identifies causes of existing problems and suggests possible solutions.

Keywords: *livestock industry, meat production, beef cattle, pigs, poultry, production cycle, cost of feed, intensive technology and ecology.*

The agricultural sector of the national economy historically occupies one of the leading positions in the system of material production in our country. This is due to favorable climatic conditions, long the agricultural traditions, relatively large proportion of the population living in rural areas and other factors. Despite the current difficult economic and political conditions, agriculture continues to steadily increase production speed, confirming its status as one of the strategic sectors of the economy.

However, despite the significant development of test questions, a number of problems still remain unresolved - a violation of reproductive structures decline in production in the livestock industry, environmental risks, etc.

Methods of study. The methodological basis of the research is a systematic approach to the study of economic, social, humanitarian, environmental and other aspects of agree-food production. The study used methods such as analysis and synthesis, historical, monographic, deduction, observation and comparison, graphics and more.

Results. Meat production is a traditional branch of agriculture. Growing different types of beef cattle spread in almost all regions of the country - beef cattle in Polesie and northern forest-steppe zone, pigs, poultry and sheep in forest-steppe and steppe zones, etc. However, the economic crisis caused by transformational changes in the 90s of the twentieth century was particularly acute in the area of agricultural production (Fig. 1). If we take the volume of production in 1990, as a base, the domestic agricultural sector has not yet regained its pre-crisis level of supply.

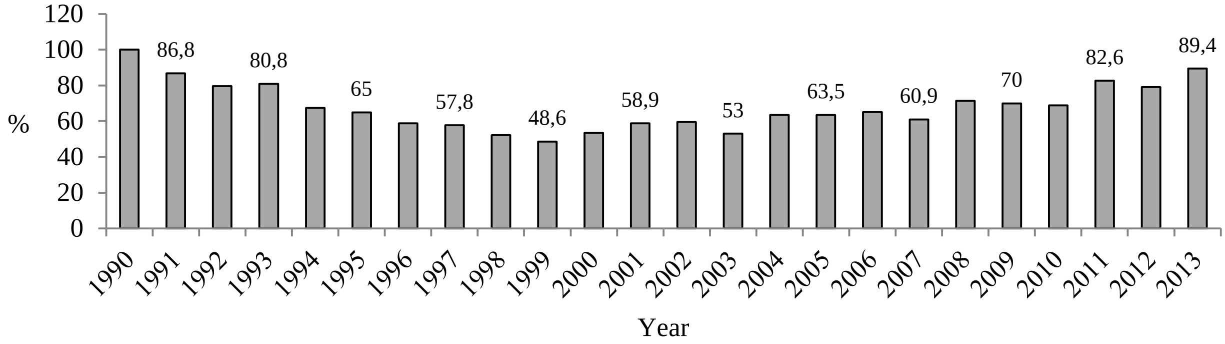

Figure. 1 Indices of gross agricultural of Ukraine, % (1990 = 100%) [1]

In the conduct of inter-industry comparisons can figure out what animal suffered much greater losses than crop (Fig. 2). As you can see, the volume of crop production, starting from 2011, began to exceed the pre-crisis level of 1990, while livestock production, after stopping the fall in 2000, in a financial year reached only 56.1% of the 1990 level.

Similarly, different trends in the volume of main livestock products within the industry itself (Fig. 3). Yes, falling eggs production ceased in 1997 and since 2010 figure was more than the pre-crisis level of production in 1990. With minor variations, milk production continues to decline.

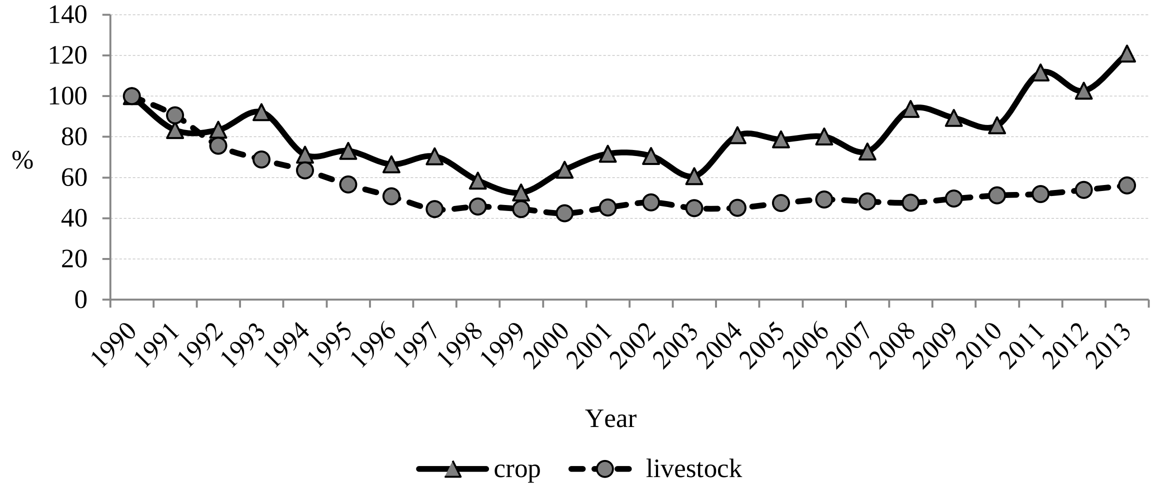

Figure. 2. Indices of gross crop and livestock farming of Ukraine, % (1990 = 100%) [1]

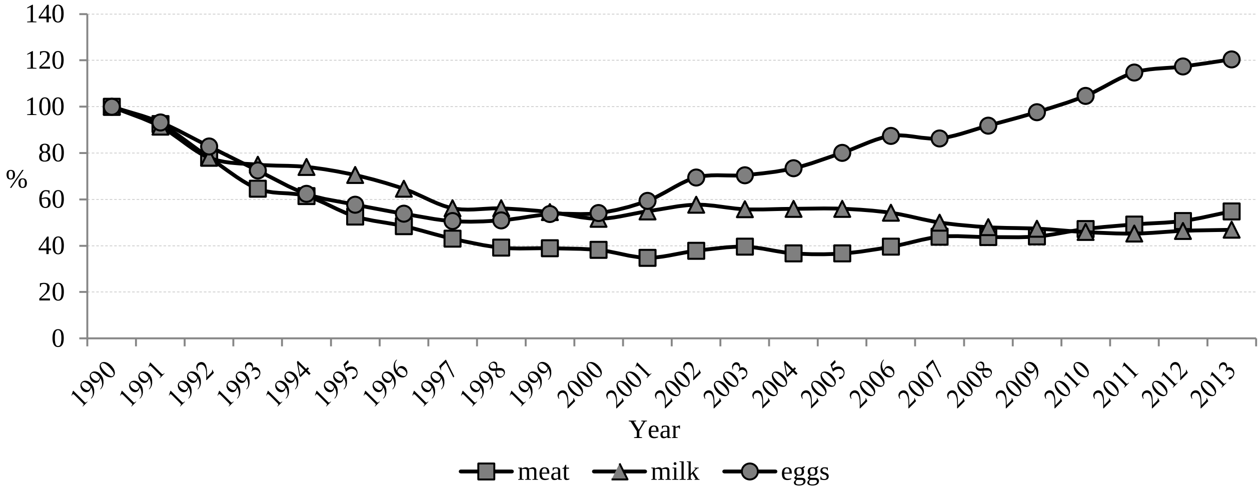

Figure. 3. Indices of main livestock products in agriculture of Ukraine, % (1990 = 100%) [1]

Bottom of the crisis in meat production can be considered 2001, when it reached 34.8% compared to 1990. Since 2002 meat production with minor variations began to grow, reaching in 2013 54.8% of the 1990 level. Along with the gradual recovery of the pre-crisis level of production of meat, is restructuring - changing the weight of individual branches of cattle breeding (Table 1).

1. The absolute size and structure of meat production in agriculture Ukraine (in carcass weight), thousand tons, % [2]

Year	In all	Beef		Pork		Lamb		Poultry		Meat of rabbit		Horse	
		thou-sand tone	%	thou sand tone	%	thou-sand tone	%	thou sand tone	%	thou sand tone	%	thou sand tone	%
1990	4357,8	1985,4	45,6	1576,3	36,2	45,8	1,1	708,4	16,3	30,2	0,69	11,7	0,27
1995	2293,7	1185,9	51,7	806,9	35,2	39,5	1,7	235,2	10,3	19,4	0,85	6,8	0,30
2000	1662,8	754,3	45,4	675,9	40,6	17,2	1,0	193,2	11,6	13,9	0,84	8,3	0,50
2005	1597,0	561,8	35,2	493,7	30,9	16,2	1,0	496,6	31,1	13,5	0,85	15,2	0,95
2010	2059,0	427,7	20,8	631,2	30,7	21,0	1,0	953,5	46,3	13,5	0,66	12,1	0,59
2011	2143,8	399,1	18,6	704,4	32,9	19,6	0,9	995,2	46,4	14,0	0,65	11,5	0,54
2012	2209,6	388,5	17,6	700,8	31,7	19,7	0,9	1075	48,6	14,2	0,64	11,7	0,53
2013	2389,4	427,8	17,9	748,3	31,3	18,7	0,8	1168	48,9	14,2	0,59	12,1	0,51
2013 to 1990, %	54,8	21,5	-27,7 p.p	47,5	-4,9 p.p	40,8	-0,3 p.p	164,9	+32,6 p.p	47,0	-0,1 p.p	103,4	+0,2 p.p

Analyze trends in the main sectors of livestock meat - beef cattle, pig and poultry, providing 96-98% of the gross production. To the extent and structure of meat production changed significantly. The largest decline experienced beef cattle. In comparison with 1990 production volumes in 2013 decreased almost fivefold. In total weight the beef cattle production decreased by 27.7 p. p.

Compared to beef cattle the pig production situation is somewhat better. Although production in the reporting year amounted to only 47.5% of that of 1990, and fraction of pig still 5 p.p. less than it was in the base, it can be stated that there is formed a positive upward trend. In addition to the gradual increase in production, evidenced by the growth of livestock animals (Fig. 4).

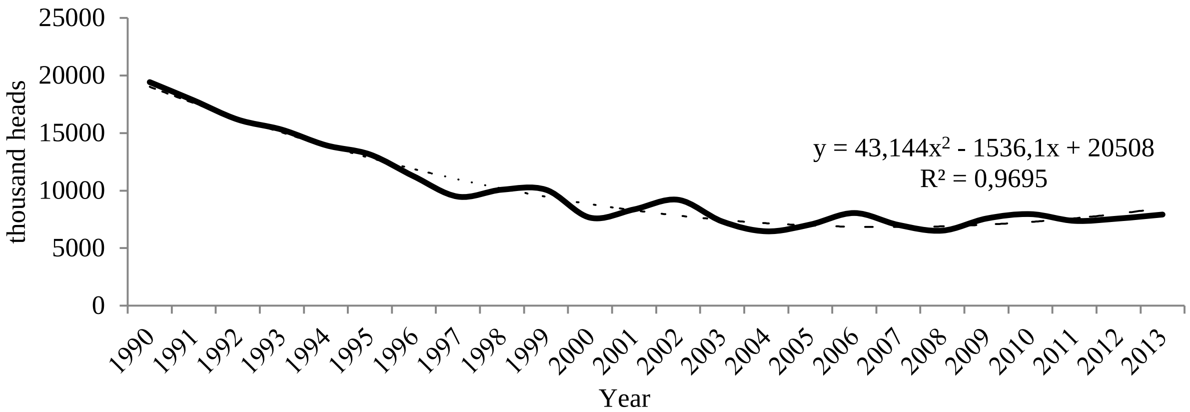

Figure 4. The number of pigs in agriculture of Ukraine, thousand heads [1]

An alternative to the previous trends is the development of producing meat birds. Thus, in the period rate of production in this sector exceeded the corresponding figure of 1990. 65%. The weight of poultry increased by 32.6 p.p.

The reasons for the decrease in meat production in general and in specific sectors have both common and distinctive features. The main common cause of decline in production in all sectors of cattle breeding was transformational crisis 90s of the twentieth century. For agriculture in general and on beef cattle breeding in particular it struck:

1) a reduction in traditional foreign markets through gap households governmental relations;

2) a reduction in the capacity of the domestic market because of rising poverty;

3) a sharp increase in production costs due to higher cost of inputs. First of all - fossil fuels, electricity, medicines, etc.;

4) reduction of direct budget subsidies while maintaining intensive technologies with low productivity growing and fattening;

5) preservation of non-market management approaches in many agricultural enterprises, which was one of the main causes of overspending and theft of resources, improper care of the cattle, unprofessional approach to the problems of production and marketing, etc.;

6) unfair procurement policy slaughterhouses. Using the administrative support of local authorities, processors used their monopoly position, the discriminatory low prices paid for live cattle and on time and not fully calculated from farms for products delivered.

Specific causes of the crisis in the areas of beef cattle should be considered in the context of each. As already mentioned the most problematic sector is beef cattle. The main causes of the crisis the industry include: 1) reduction of production in dairy cattle; 2) largest cost of feed per unit of output; 3) longest production cycle; 4) difficulties extension forage base and others.

In addition to the existence of specialized beef cattle, essential resource for the development of the industry was dairy cattle. For example, in 1991 stock of dairy cattle cows made up 8378.2 thousand heads. [2]. With a minimum rate of culling 10-15% on gain was raised over 840 thousand heads of the rejected cows. The exit of offspring was 88%. Thus, the offspring received 7373 thousand heads of which nearly 10% was bulls - 737 thousand heads. Thus, only by cows and bulls rejected dairy cattle feeding provided meat thousand in 1577 thousand heads. Real culling cows was greater. There was culling heifers repair. Therefore, the feeding received about 2000 thousand heads of cattle from dairy cattle. For comparison - in 2013 number of cattle for meat growing was 1580 thousand heads. Of course, dairy cattle played a supporting role. The main producer of beef was specialized beef cattle. In 1991 in beef cattle, there were 13962 thousand heads in growing and fattening [2]. However, despite the scale beef production was low profitable and unprofitable in many cases. For example, in 1990 average daily cattle breeding, fattening and gain that amounted to only 431 grams. The average weight per head of cattle, which was sold to processing plants, was 393 kg. It is not difficult to calculate that at a specified level of performance in order to achieve this it was necessary to hold the weight of the animals almost 2.5 years. It's almost twice as much as the conditions of use of intensive technologies. The costs of feed were 13.53 quintals of feed units per 1 hundredweight of live weight [1]. For comparison - the intensive feeding technology, the cost of feed ranged from 6.1 to 8 quintals of feed units per 1 hundredweight of live weight gain.

Therefore, the overhead at times increased the cost of production. In the pre-reform period, losing beef cattle industry survived through direct budget subsidies. In modern conditions any changes in production technology was not beef. In 2013 average daily cattle breeding, fattening and gain that amounted to only 508 grams. The average weight per head of cattle, which was sold to processing plants, was 441 kg. That is, for commodity products need more than 2 years. The costs of feed were 14.97 quintals of feed units per 1 hundredweight of live weight [1]. In this approach, beef cattle industry is chronically unprofitable - in 2013 is -43.3%.

In addition to the above, one of the most important problems that impedes the revival of beef cattle industry in the current environment there are significant difficulties with the extension fodder. Intra competition for resources beef cattle production program crop production. At the current level of state support for the cattle industry, the private agricultural producers is difficult, if not impossible, to convince expand fodder wedge by reducing the acreage of highly profitable crops - sunflower, soybean, canola, winter wheat and so on.

In the pig industry situation is different. Despite the fact that this level of production is still lower than in 1990, pigs demonstrates rather stable trend of increasing output (tab. 1, fig. 2). The main motivating factors is the traditional gastronomic tastes Ukrainian, including meat and fat pigs are prominent, rapidly increasing grain production - the main component of pig feed rations. Labor productivity in industry is still low. In 2013 average daily gain of pigs in growing and fattening comprised 474 g average weight per head of pigs sold to processing plants - 109 kg [1]. That is, the type of commodity cattle up in 8 months of age. The costs of feed were 4.62 quintals of feed units per 1 hundredweight of live weight. This compared to 1990 - very good result. But it is much inferior production figures, which reach when using intensive technology, successfully used by farmers USA and the EU. In particular, the fattening period is 100 days, average daily gain - 850 g, the cost of feed - 2.24 quintals of feed units per 1 hundredweight of live weight, level of profitability - 35% [3].

Poultry industry is now the leader of Ukrainian cattle breeding. The reason is that intensive poultry - the precocious livestock industry, less capital intensive and most mobile in volatile market conditions. Among all the sectors of cattle breeding, poultry has the shortest production cycle - from 30 to 42 days (depending on the planned condition fatness) and the lowest cost of feed - 1,8-1,9 quintals of feed units per 1 hundredweight of live weight.

Thus, the analyzed the state of the main branches of cattle breeding Ukraine suggests that for immutability factors influence a trend towards reduction in beef cattle may continue while the pig will recover and poultry - to grow. This market trend, which was formed under the influence of actual factors of influence: 1) objective - the duration of the production cycle, unit costs, the availability of food resources, etc.; 2) subjective - the level of government support, performance management, market coordination efforts of agricultural producers and others. Consider the existing structure of meat production satisfactory, because it is formed mainly under the influence of the market forces cannot.

Primarily due to environmental factors. For beef and dairy cattle - the main source of organic fertilizer for crop fields. Due to the intensive development of organic farming as a result of growing demand for environmentally friendly food in developed countries, in this context, there is no alternative to cattle breeding. The second reason is different from the nutritional properties of pork meat cattle. For example, lean beef is the basis for infant and dietetic foods. The third reason - in Ukraine there are regions where the production of cattle products can be highly profitable. There are areas of Polesie and Forest-steppe zone of stable moisture conditions. It is necessary to create conditions for pasture maintenance, which can achieve the lowest production costs.

In the case of pig problem - right-opposite. Adult pig produces 2.3 tons per year Swine manure is very aggressive to the environment. Before you export it to the fields, manure must withstand a long time to neutralize it available pathogens, helminthes eggs and weed seeds. But it's normal manure. Waste of industrial pig farms as fertilizer, cannot be used at all - they contain up to 400 hazardous substances, including heavy metals, antibiotics, hormones, pesticides, worms, viruses, and pathogenic microbes. Remains of antibiotics cause the development of specific organisms that are resistant to antibiotics that treat people. A separate problem it is a bacterium Pfisteria piscicida. Getting from manure lagoons in the river, it leads to the death of millions of fish annually. This bacterium is dangerous for people - threatening diseases infected the lungs and brain [4]. Thus, the main limiting factor in the development of industrial pig production is its environmental burden.

Conclusions:

1) the main industries of cattle breeding in Ukraine is poultry, swine and beef cattle. They account for 96-98% of the gross production of the product;

2) meat output in agriculture Ukraine has not yet reached pre-crisis level of production in 1990, but continue to grow;

3) increase meat production is due to the construction and pig in beef cattle crisis continues;

4) an increase in meat production is due to poultry and pig breeding, in beef cattle crisis continues; consider the existing structure of meat production cannot be satisfactory. Primarily because of the environmental component of the problem - cattle are a source of organic fertilizer, pig waste - a source of environmental hazards;

5) restore beef cattle should be subject to special state program aimed at the development of the industry in areas that have favorable climatic conditions - regions that are located in Polesie and forest-steppe zone of stable moisture conditions;

6) the size of the industrial pig farms, their spatial location and the environmental impact would be subject to state ecological expertise.

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