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ABSTRACT: The article considers the current state and development of the poultry industry on the example of Surkhandarya region. The research describes the main trends in the development of poultry. Comparative and dynamic statistical methods of statistics using local statistical data were widely used in the course of the research work. In particular, feathers are used in the production of household goods, toys, fishing gear and poultry feed. Poultry manure is a valuable fertilizer in the wet state. In addition, dry poultry manure is used in the production of mixed fodder in an unconventional way.

KEYWORDS: market economy, agriculture, animal husbandry, food security, poultry, broiler, agricultural enterprises, farms, economic efficiency, product cost, export, import, dynamics, population, living standards, employment.

INTRODUCTION

Today, the country is taking consistent measures to further develop the poultry industry and increase the volume of production of finished products for export and expand the range of products, as well as to provide the population with quality and affordable poultry products. We can see that the Resolution of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev dated November 13, 2018 "On additional measures for further development of poultry" and a number of decrees and resolutions of our government on the development of poultry pay great attention to the development of this sector. In his Address to the Parliament, the President of the Republic of Uzbekistan noted that "... we must sharply increase the volume of food production through the development of poultry." Poultry is one of the most important branches of animal husbandry, which provides the population with dietary food products (eggs and poultry), industry with raw materials (feathers, feed). Poultry manure is also a valuable organic fertilizer for growing agricultural crops. The poultry industry is a low-cost, market-oriented, cost-effective sector, which plays an important role not only in improving the living standards of the population, but also in providing employment. Therefore, there is a need for a comprehensive economic statistical analysis of the development of the poultry industry.

MATERIALS AND METHODS

The development of the poultry industry has been studied by a number of foreign and local scientists using economic statistical methods. In particular, E. Darde developed a methodology for statistical analysis of the livestock sector, which divided livestock enterprises into three categories: agricultural enterprises, farms and households, and in its analysis used the methods of statistical grouping, comparison and dynamic analysis of statistics [4].

N. Bykova widely used statistical methods in studying the role of the poultry industry in ensuring national and regional food security [3].

L. Gulyayev used the methods of dynamic, monographic and comparative analysis of the current state and development trends of the poultry industry [5]. The author considers the widespread use of a cluster system, which covers the process from the cultivation of poultry

products to its sale, as well as the deep processing of poultry products as a necessary factor in the development of this industry.

One of the scientists of our country, H.R. Rakhmankulov used typological and analytical grouping, dynamic, comparative and monographic analysis methods in the study of reducing the cost of production and increasing the profitability of farms in the livestock sector in Surkhandarya region. Livestock farms were divided into state farms, collective farms, and specialized poultry farms [7].

V.I. Nechaev analyzed the current state and main trends in the development of the poultry industry and the poultry market in the Russian Federation using the main methods of statistics. In this analysis, three categories of poultry farms: agricultural enterprises, population farms and dekhkan (farmer) farms were carried out over the years [6].

Based on the above considerations, we consider it expedient to implement comparative and dynamic analysis of three categories of poultry farms in Surkhandarya region: agricultural enterprises, farms and households, taking into account the specifics of the development of this sector in the development of the poultry sector.

It is known that poultry eggs and meat are used for food purposes. Eggs are made primarily from chicken, quail and tsesarka. Eggs contain the most important nutrients and biologically active substances for human health. According to experts, poultry eggs contain 13% protein, 11% fat, 1% mineral and vitamin complex. In terms of nutrition, 10 chicken eggs weigh 0.8 kg. corresponds to beef. Eggs contain about 85% water, the rest is pure protein, vitamins and enzymes. Poultry egg yolk contains 52% water, 32% fat and about 16% protein.

Poultry is also distinguished by its high nutritional and dietary qualities. The highest quality poultry is obtained from broilers. They are grown on specialized farms. The white meat of broilers contains 20% nutritious protein, 1-2% fat, 92% essential amino acids. Therefore, in developed countries, more attention is paid to the cultivation of broilers in conditions where the feed base is limited. In addition, poultry by-products are also widely used in industry. In particular, feathers are used in the production of household goods, toys, fishing gear and poultry feed. Poultry manure is a valuable fertilizer in the wet state. In addition, dry poultry manure is used in the production of mixed fodder in an unconventional way. It contains many vitamins and minerals that are part of a mixed diet. Incubation and slaughter wastes are also used in the production of mixed fodder.

When there are sufficient conditions for the development of poultry, there are specific features that determine the economic efficiency of poultry development:

- □ Poultry farming is one of the fastest growing industries. It is characterized by high rates of reproduction of poultry, low consumption of material resources per unit of output and low labor costs;
- □ Due to the low level of seasonality, it is possible to evenly distribute the volume of production and sales of poultry products throughout the year, which is important in the context of inflation;
- □ Since poultry products are a basic necessity, the demand for them will always be stable, regardless of the economic and political situation in the country;
- □ Eggs and poultry go directly into the process of trade and processing, so there is no direct supply and demand for it;

- Poultry farming is a sector that is quick to adapt to sharp changes in production compared to other livestock sectors, as the number of poultries is not so dependent on the size and quality of land;

- In foreign experience, the main producers of poultry products are specialized enterprises (poultry factories), which can produce the bulk of poultry products. The production process in these enterprises covers everything from the incubation process of eggs to the feeding process;

- Poultry feeding is mainly carried out at the expense of purchased feed (mixed and vitamin-fortified feed), so the development of this industry is closely linked to the grain market and the volume of mixed feed production.

Poultry farms have four sectors, as in the Commonwealth countries: egg, meat, egg-meat and breeding. In our country, as in other countries of the world, chickens are mainly used in poultry. They make up almost half of the total poultry in the world, providing 95% of eggs and 85% of poultry meat. At present, Surkhandarya region produces 194 eggs per capita, compared to 221 at the national level. According to international standards, the consumption of eggs is 219, the national consumption is 112. Currently, egg production in our country is at the level of international standards, and more than 109 eggs are produced above national standards.

In 2019, the country produced 221 eggs per capita, while in Kazakhstan this figure was 236 in 2013. Today, Uzbekistan has developed a national norm of consumption of eggs and poultry: 121 eggs and 9.6 kg of poultry per capita. The demand for eggs in our country is mainly met by domestic production. That is, 80% of the product is exported to the domestic market and 20% of the product is exported to the foreign market. The level of poultry production currently remains dependent on imports. According to the Food and Agriculture Organization of the United Nations, the average world meat consumption is 38.7 kg.

In the ranking of world meat consumption, Uzbekistan ranks 120th out of 177 countries with a population per capita of 25.8 kg. According to medical standards, a person should consume an average of about 60 kg of meat per year (160 grams per day), while consuming 28 kg per year is equivalent to 75 grams per day.

Uzbekistan produces 43 kg of live weight meat per capita. According to medical standards, it should weigh 55-58 kg, which lags behind neighboring Kazakhstan and Kyrgyzstan. Poultry farming is slowly transitioning to a path of rapid development. In our country, according to national traditions (meat consumption consists mainly of mutton and beef), the level of consumption of poultry meat lags behind. The average consumption of poultry meat in Kazakhstan is about 35 kg, in Turkmenistan - 12 kg, in Kyrgyzstan - 6 kg, in Uzbekistan - 5.8 kg, and in Tajikistan - 3 kg. Given the increase in the price of beef and mutton, we can also observe an increase in the consumption of poultry meat.

The main objectives of the statistical study of poultry are:

- to determine the level of development of poultry, their individual branches and the processes that take place in them;

- coverage of the status and development of poultry farming in individual agricultural enterprises, their groups and various economic categories operating in the poultry sector;

- study of the situation with the placement of poultry in the regions of the country;

- assessment of the conditions of production of poultry products and identification of reserves to increase the volume and improve the quality of poultry products;

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• □ to determine the place and role of poultry in the agro-industrial complex, including the livestock sector.

The system of poultry statistics should always provide a reliable and comprehensive coverage of the state of the industry, reveal the laws of its development and the most important interrelationships, assess production efficiency and regulatory measures, reveal existing imbalances, eliminate them and use available resources.

This system primarily covers two specific indicators:

1. Indicators of the number of heads of agricultural poultry - indicators of quantity, composition, quality, movement and use. This is the need for constant updating (care) of farm poultry, which requires the study of specific indicators of herd reproduction.

2. In accordance with the indicators of gross output of poultry (volume, composition, quality, formation and movement), productivity Poultry farming is mainly concentrated on specialized poultry farms and private households. The dynamics of the number of poultry heads for all farm categories are described in Table 1 below.

TABLE 1. DYNAMICS OF THE NUMBER OF POULTRY BIRDS IN SURKHANDARYA REGION

Years	In all farms	Including by economic categories (in thousands)		
		In agricultural enterprises	On farms	In households
2007	1359,7	236,3	76,4	1047
2008	1640,4	286,7	195,9	1157,8
2009	1834,6	334,4	244,6	1255,6
2010	1978,8	419,8	208,5	1350,5
2011	2352,5	590,5	232,9	1529,1
2012	2673,2	654,2	237,0	1782,0
2013	2873,0	703,4	228,6	1941,0
2014	3085,9	737,9	216,5	2131,5
2015	3351,7	892,0	215,1	2244,6
2016	3985,3	1153,8	282,9	2548,6
2017	3997,3	1231,3	327,7	2438,3
2017	4099,9	1320,5	342,8	2436,6
2018	4554,4	1332,4	729,6	2492,4
2019	4808,5	1201,8	1099,1	2507,6
2020	4893,7	2140,7	245,0	2508,0
2021	4978,3	2175,3	398,3	2404,7
2022	5128,3	2435,9	435,3	2257,1

Source: Surkhandarya regional statistics department

In 2012, there were 2673.2 thousand heads of poultry in all categories of farms, in 2015 this figure increased by 25.4% and amounted to 3351.7 thousand heads. From 2009 to 2020, the number of birds in Surkhandarya region has been growing steadily. At the beginning of 2020, this figure reached 4,893.7 thousand (about 2.6 times more than in 2009 and 1.8 times more than in 2012).

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In 2009-2020, the increase in the number of poultry in all categories of farms increased by 3059.1 thousand heads, while in agricultural enterprises in 2020 increased by 6.4 times compared to 2009, 3.2 times compared to 2012 and reached 2140.7 thousand heads. The number of poultry on farms in 2020 reached 245 thousand, which is 3 times less than in 2018 and 4.5 times less than in 2019. In 2020, this figure increased by 2 times compared to 2009 and 1.4 times compared to 2012, and the number of poultry amounted to 2508.0 thousand heads. The share of agricultural enterprises in the total number of poultry in the region increased from 18.23% in 2009 to 32.21% in 2017, and in 2020 amounted to 43.7%.

The share of farms in Surkhandarya region in 2009 amounted to 13.33%, and a downward trend can be observed until 2017. While the number of birds will increase in 2018 and 2019, we can observe that in 2020 the number of birds will decrease. In 2020, it doubled compared to 2018, and decreased by 4.5 times compared to 2019, and in 2020 the share of farms was 5%.

The share of households has been declining from year to year. In 2007, the share of households in the total number of poultry was 77%, and from 2007 to 2018 the share of households has a steady downward trend. In 2010, this figure was 68.4%, in 2017 it was 61%, in 2018 it was 54.7%, and in 2020 it was 51.2%.

TABLE 2. INDICATORS OF POULTRY PRODUCTION IN SURKHANDARYA REGION

Poultry products	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Thousands of eggs	21499	23948	27318	31178	33400	46375	51300	52474	52097	54214
Including										
Farms	4266	4777	12578	13740	30500	96518	75952	78186	83355	86746
In households	14872	16888	18722	21226	21800	24320	21833	22563	21359	22769
In agricultural enterprises	62002	65819	73383	85777	85498	124030	218721	220918	224018	227698
Poultry meat (in tons)	2448	2525	2669	2707	2756	2539	1605	2023	2884	2734
Including										
Farms	48	49	58	74	12	69	64	73	75	78
In households	2260	2331	2496	2552	2392	2188	1253	1629	2475	2311
In agricultural enterprises	140	145	115	81	352	282	288	321	334	345

Source: Surkhandarya regional statistics department

According to the table, egg production in Surkhandarya region has increased due to an increase in the number of poultry. The volume of egg production in the region in 2019 increased

by 2.4 times compared to 2013 and 1.5 times compared to 2017. While the share of households in egg production was 69% in 2013, in 2019 this figure decreased to 42.6%. The share of specialized agricultural enterprises increased from 29% to 42.6%. The share of farms has also increased.

During the analyzed period, the volume of poultry production increased steadily from 2013 to 2017. In 2018 and 2019, poultry production decreased. That is, in 2019, it decreased by 33% compared to 2013, and by 52% compared to 2017.

Poultry farming in the region is mainly accounted for by households. The share of farms in this category was 92.3% in 2013, and in 2019 it was 78% due to a decrease in the volume of poultry meat. During this period, the share of farms and specialized agricultural enterprises increased.

In Surkhandarya region, egg production per capita in 2007 was 175 eggs, and from 2008 to 2014 it decreased to 77 eggs. In 2015-2016, it increased by 185-191 units. In 2017-2019, there was a decrease in egg production per capita.

Based on the economic statistical analysis of the development of poultry in Surkhandarya region, we came to the following conclusions:

- In Surkhandarya region, poultry production has changed mainly due to an increase in the number of poultry. We can observe changes in the number of birds across different farm categories. In the past, poultry products were mainly distributed to households, but now it can be seen that the share of agricultural enterprises and households has decreased, while the share of farms has increased. In many countries, poultry production is mainly performed by agricultural enterprises;

- When all the necessary conditions are in place in poultry, the impact of seasonality on its development is minimal. This situation can be observed in farms transferred to the industrial basis. It is not always possible to provide such conditions in households. Such conditions can be provided in agricultural enterprises and farms. Therefore, poultry production has increased in this category of farms;

- In recent years, the price of meat products has increased significantly. The main reason for this is the increased costs associated with growing them. Poultry production has increased mainly due to the fact that their products are fast-growing and low-cost, as well as their rapid recovery;

- The government is creating all the necessary conditions for the development of poultry farming and the promotion of export activities. This leads to an increase in poultry production and an increase in productivity.

CONCLUSION

Based on the above, in order to further develop the poultry industry in Surkhandarya region, first of all, it is necessary to introduce modern technologies in this area, modernize production processes and expand exports of finished products:

It is necessary to promote the development of other species of birds in Surkhandarya region. Depending on the conditions of the regions, it is necessary to establish farms engaged in the cultivation of other types of poultry: ducks, geese, turkeys, quails, sparrows, hawks;

Not only increase the production of poultry products in the form of eggs and poultry, but also increase the export of products through their processing and the introduction of recycling of poultry waste;

Reducing the impact of the poultry industry on the environment, timely elimination of poultry diseases and attention to the cultivation of environmentally friendly products;

Establishment of import-substituting nutritional and vitaminized feed production in poultry farming in the region;

Training of specialists engaged in this activity in poultry farms and increase of their experience in poultry farms in the development of poultry farming.

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