The current situation of the poultry industry and the formation of a strategy for its sustainable development in the region

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Abstract. The article presents the systematization of concepts related to the sustainability of the enterprise. The analysis of the poultry industry of the Krasnoyarsk region and the efficiency of egg production from the main producers of the region is presented. The result of this study is the selecting a strategy for sustainable development of poultry enterprises and the proposal of measures for its implementation, which is applied to the poultry industry as a whole in the region.

1. Introduction
Currently, in market conditions, domestic agricultural organizations operate in a strict competitive environment characterized by strong instability. Therefore, a particularly necessary condition for their successful functioning is the formation of a development strategy that should take into account the state and dynamics of changes in the competitive market environment. The aim of forming a development strategy in agricultural organizations should be to build the capacity for their cost-effective, competitive and sustainable functioning in the future.

The problem of sustainable development is of particular interest in the modern economic literature. «Sustainable economic development» is a consistent, systematic improvement of one situation by another due to positive growth and balanced interaction of the economic system components over a long period of time, taking into account environmental problems [1].

Earlier in the studies, the authors noted that, producers in the Russian Federation can be competitive in the local market of agricultural products only by reducing production costs and increasing labor productivity, which characterizes the stability factors [2].

In the work of E. N. Kucherova the conceptual apparatus systematization of enterprise sustainable development is presented, the main concepts of this process are given in table 1 [3, 4].

| Table 1. Conceptual apparatus systematization of enterprise sustainability. |
|---------------------------------|---------------------------------|
| Author                          | Opinions of enterprise sustainable development |
| 1. Ozhegov S. I.                | ... the process of natural change, the transition from one state to another, more perfect; |
| 2. Philosophical dictionary     | ... natural qualitative change ... of objects, characterized as irreversible and directed |

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3. Kucherova, E. N. [3] ... progressive dynamic change in the state of the system

Stability

1. Bautin V. M., Chernikova A. A. ... functional use of the entire production potential, which allows to ensure profitability, as well as to develop production, modernize the material and technical base, improve the social climate in the workforce, successfully adapt to changing environmental conditions

2. Psareva N. Yu. ... the ability to maintain profits at a given level

3. Kulback N. I. ... an equilibrium balanced state of economic resources that provides stable profitability and normal conditions for extended reproduction of sustainable economic growth in the long term, taking into account the most important external and internal factors

Sustainable development

1. Grigorieva O. N. ... is the stability of the controllability of the system

2. Kucherova, E. N. [3] - it is an equilibrium balanced progressive change of all indicators of the enterprise stability, able to resist negative trends, while maintaining the integrity and basic properties

Samuel B. Moore and Susan L. Manring in their study note that... «Sustainability strategies create many synergistic effects for Small and medium sized enterprises (SMEs) working collaboratively, as well as systematic benefits for the commons» [5].

Thus, it can be noted that the sustainable development of the enterprise is the state of functioning as an implementation result of the development strategy, characterized by a constant or positive change in the value of sustainability indicators that are within certain limits, adopted to assess the sustainable functioning in a certain period of time [6].

2. Research methods

Sustainable development of agricultural organizations is now becoming an important condition for the strategic development of Russia and reducing the country's dependence on commodity exports, on the one hand, and food imports, on the other. The formation of a strategy for sustainable development of agricultural organizations is important and necessary, for the following reasons: agricultural organizations face problems that undermine the food security of the country; agricultural organizations often have untapped economic potential, the development of which would improve the well-being of rural residents and the population as a whole; sectoral policies and market forces cannot fully explain the heterogeneity of the problems and potentials of agricultural organizations and cope with negative external factors [7].

Poultry farming is one of the most precocious branches of animal husbandry. This is the most science-intensive and dynamic branch of the agro-industrial complex, characterized by rapid reproduction of livestock, intensive growth, high productivity and viability, the lowest cost of living labor and material resources per unit of production.

In the period from 2012 to 2016, the role of poultry farming in the agricultural enterprises of the Krasnoyarsk region decreased significantly. The share of poultry meat in the revenue structure decreased from 15.7 to 3.7 %, eggs - from 6.7 to 6.1 %. The main reason for the decline in the role of poultry farming in the economy of the region was the reduction of poultry. In general, the number of poultry in agricultural enterprises decreased by 2735 thousand heads or by 39.5 %. The largest reduction occurred in the Central zone – 2038 thousand heads (41.5 %), including in the Berezovsky district – by 2560 thousand heads, or three times. On 369 thousand heads the number of poultry in the southern zone decreased by 245 thousand heads in the Western zone.

Despite the significant reduction, the largest number of poultry is concentrated in the agricultural enterprises of the Central zone, in 2012 – 70.9 %, in 2016 - 68.5 % of the total number of poultry. The share of Berezovsky district in 2012 accounted for 54.8 % of the number of poultry, in 2016 its share
decreased to 29.5%. The most unfavorable year for poultry meat production in the Krasnoyarsk territory was 2013, when in all regions, except for the Northern zone, a loss was received from the sale of poultry meat (table 2).

Table 2. Profitability of eggs (without subsidies), %.

| Agricultural zone                        | 2012 year | 2013 year | 2014 year | 2015 year | 2016 year |
|------------------------------------------|-----------|-----------|-----------|-----------|-----------|
| East                                     | 26,3      | 6,0       | 273,6     | 2,9       | -7,4      |
| Western                                  | 16,5      | 7,1       | -9,7      | -3,5      | 8,9       |
| Central                                  | 9,0       | 8,8       | 8,0       | 7,0       | -1,6      |
| including the Berezovsky district        | 10,6      | 4,3       | 0,5       | 2,5       | -4,7      |
| South                                    | 14,7      | 11,2      | 17,2      | 20,0      | 24,5      |
| North                                    | -1,9      | 9,2       | 15,7      | -4,6      | -2,1      |
| The average for the region               | 12,0      | 8,6       | 5,9       | 5,5       | -1,6      |
| Deviation from the average on the region, %: |          |           |           |           |           |
| East                                     | 14,3      | -2,7      | 267,7     | -2,5      | -5,8      |
| Western                                  | 4,5       | -1,5      | -15,5     | -9,0      | 10,5      |
| Central                                  | -3,0      | 0,2       | 2,2       | 1,5       | 0,1       |
| including the Berezovsky district        | -1,4      | -4,3      | -5,4      | -2,9      | -3,1      |
| South                                    | 2,8       | 2,6       | 11,4      | 14,6      | 26,1      |
| -13,9                                    | -10,1     | -9,8      | -10,1     | -0,5      |           |

On average in the region in 2012 the profitability was 12.0 %, and in 2016 from the sale of eggs there was a loss in the farms of the Eastern, Central and Northern zones. The level of loss amounted to 7.4, 1.6 and 2.1 %, respectively, on average in the region-1.6 %.

One of the main eggs producers in the Krasnoyarsk region is JSC «Poultry farm Barkhatovskaya». Its main competitor is the poultry farm «Zarya», located in Emelyanovsky district (table 3).

Table 3. Efficiency of egg production in agricultural enterprises of the Krasnoyarsk region.

| Indicator                                      | Agricultural enterprises of the Krasnoyarsk region | Poultry farm Barkhatovskaya | Poultry farm «Zarya» |
|------------------------------------------------|--------------------------------------------------|-----------------------------|----------------------|
| Number of poultry, thousand head.              | 4186                                              | 1233                        | 1156                 |
| Net weight in the region, %                    | 100,0                                              | 29,5                        | 27,6                 |
| Average egg production, pieces.                | 325                                                | 330                         | 343                  |
| The total production of eggs, thousand pieces.  | 561810                                             | 259000                      | 234290               |
| Net weight in the region, %                    | 100,0                                              | 46,1                        | 41,7                 |
| Production cost of 1 thousand pieces, rub.     | 3670                                               | 3615                        | 3594                 |
| Total cost of 1 thousand pieces, rub.          | 3710                                               | 3845                        | 3552                 |
| Average selling price 1 thousand pieces, rub.  | 3649                                               | 3664                        | 3621                 |
| Profit (loss) per 1 thousand pieces, rub.      | -61                                                | -181                        | 69                   |
| Level of profitability, %                      | -1,6                                               | -4,7                        | 1,9                  |

The level of profitability, %: 1,6 – 6,7
According to the table, the share of poultry farms «Barkhatovskaya» and «Zarya» accounts for 29.5 and 27.6% of poultry, 46.1 and 41.7% of average egg production, respectively. Poultry farm «Barkhatovskaya» is inferior to its main competitor in terms of such indicators as average egg production (less by 13 pieces.), the total cost of 1 thousand eggs (more by 293 rubles, or 8.3 %), the level of profitability (lower by 6.7 %).

3. Results
An important factor in the development strategy of the poultry industry is to study the strengths and weaknesses of the enterprise can be used SWOT analysis. Based on the analysis, we note that JSC «Poultry farm Barkhatovskaya» has a number of strengths that distinguish it from competitors. The most important of them are good quality of products, availability of highly qualified personnel, and proximity to places of sale of products.

The enterprise also has a set of opportunities that can contribute to strengthening its position in the market: expanding the range, increasing production volumes and increasing its profitability. There are also weaknesses - it is necessary to properly develop investment and innovation policies, marketing system to improve communication with the consumer, increase the ability of the organization to expand production. Threats are mainly external in nature; the enterprise cannot have a significant impact. Therefore, it is necessary to develop alternative options for action in case of increased influence from any negative external factor - the search for alternative suppliers, the creation of reserves to cover possible losses.

In order to choose a strategy for JSC «Poultry farm Barkhatovskaya» we consider four basic growth strategies: penetration, market development, product development and diversification. The analysis results of the strategy choice for the enterprise development of the poultry industry are reflected in table 4.

| Strategies             | Opportunity | Description                                                                 | Key sources of enterprise growth                                      |
|------------------------|-------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Penetration strategy   | Likely      | The enterprise has a chance to implement this strategy in the presence of sufficient financial resources | 1. Introduction of intensive resource-saving production technologies |
| Market development     | Impossible  | The enterprise has the opportunity to grow with the help of new products and diversification of production | 2. Expansion of the product range due to its processing at the enterprise |
| Product development    | Possible    | The development of a new product is a great source of growth. The enterprise has all the resources and capabilities to implement the strategy | 3. Change of terms in sales contracts (application of discounts flexible system) |
| Diversification strategy | Likely     | Diversification of production is another source of growth for the enterprise |                                                                      |

According to the results of the analysis, it can be noted that the penetration strategy cannot be recommended for the enterprise, as it refers to the strategies of concentrated growth and is recommended in the case when the market is fast-growing and not yet saturated. In addition, the market penetration strategy and the market development strategy are high-cost strategies, as they are associated with intensive advertising support and low-price strategies.
Diversification strategy is the riskiest of the proposed growth strategies. When choosing a diversification strategy, an enterprise should be able to invest and allocate additional resources for the development of a new business. The best option for JSC «Poultry farm Barkhatovskaya» is a product development strategy based on reducing the cost of sold products. The main objective of the strategy is to obtain competitive advantages, including through:

- increase poultry productivity and increase egg production;
- reduce the cost per unit of output;
- expansion of the product range.

To solve these problems, it is possible due to the reconstruction of poultry houses and their instrumentation with modern equipment.

4. Conclusion
The study found that the main reason for the decline in the role of poultry farming in the economy of the region was the reduction of poultry. In general, the number of poultry in agricultural enterprises decreased by 2735 thousand heads, or 39.5 %. In the period from 2012 to 2016, the average egg production of poultry in the region increased from 293.9 to 325.3 pieces. Despite the increase in productivity, due to the reduction of poultry number, the average egg production in the whole region decreased by 161.4 million pieces. The outrunning growth of the cost price in comparison with the sales prices led to a decrease in the profitability of egg production. On average, the margin in the region in 2012 was 12.0 %, and in 2016 a loss was received from the sale of eggs. The level of loss on average in the region was 1.6 %. One of the largest producers of eggs in the region is JSC «Poultry farm Barkhatovskaya». In order to choose a strategy for sustainable development of this enterprise, four basic growth strategies are considered: penetration, market development, product development and diversification. The best option for JSC «Poultry farm Barkhatovskaya» is a product development strategy based on reducing the cost of products sold. Implementation of the proposed strategy is possible as a result of the implementation of such measures as the introduction of the enterprise product development strategy and reconstruction of poultry houses for keeping laying hens and their equipment with modern cage equipment UniVent manufactured by Big Dutchman (Germany).

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