ЕКОНОМІЧНІ НАУКИ

УДК: 331.556: 332.021 DOI: 10.15587/2313-8416.2015.40319

THE STATE AND PROSPECTS FOR THE DEVELOPMENT OF POULTRY ENTERPRISES IN UKRAINE

© D. Makhovsky

The article considers the place of the poultry sector in the agro-industrial complex and its role in supporting the country's economy, the state and prospects of functioning and development of the poultry industry. Potential opportunities and ways to improve the economic efficiency of poultry enterprises are analyzed and identified. The main problems in the operation and development of enterprises and ways to overcome them are found out **Keywords:** poultry stock, poultry, agriculture, food processing, agricultural producers

У статті розглянуто місце птахівничої галузі у агропромисловому комплексі та її роль у підтримці економіки країни, стан та перспективи функціонування та розвитку птахівництва, проаналізовано і визначено потенційні можливості та шляхи підвищення ефективності господарської діяльності птахівничих підприємств, з'ясовано основні проблеми у діяльності та розвитку підприємств та шляхи їх подолання Ключові слова: поголів'я птиці, м'ясо птиці, сільське господарство, переробка продукції, сільськогосподарські виробники

1. Introduction

Poultry farming belongs to those sectors of agriculture the development of which enables to improve rapidly the growing demand for high quality food products of animal origin. This sector provides people with energetically valuable food products, it is very attractive for investment, has considerable potential for economic development, but in fact this sector of agriculture is not used at full capacity and needs state support, along with other livestock sectors.

2. Problem Outline

In accordance with organizational and technological capabilities and terms of investments return poultry farming is the most mobile in comparison with other livestock sectors. This sector is noted by early maturation, high rates of stock reproduction and use of feed protein, relatively low energy intensity, high level of mechanization and automation of production processes.

Due to the high quality of poultry products and fast payback, this sector takes priority among livestock industries in all countries. Therefore, it is necessary to enhance and improve efficiency of poultry production enterprises to better use the potential of the sector at the present stage.

The aim of the research is to assess the situation, established in the course of recent years in the poultry farming sector, and identify potential opportunities and ways to improve economic activity of poultry enterprises.

3. Analysis of recent research and publications

Research studies of such local scientists as: B. A. Melnik, L. E. Ogorodnik, I. F. Yasynovskiy, V. G. Andriychuk, F. O. Yaroshenko, A. Oleynik, P. T. Sabluk, V. J. Ambrosov, V. J. Mesel-Veselyak, N. V. Prysyazhnyuk [1], N. G. Kopytets [2], O. B. Stefaniv [3], I. O. Shchetinina [4] and others are dedicated to effective functioning and problems of poultry farming development.

Works of these scientists made a significant contribution to solving the practical aspects of the problem. Taking into account the rapid development of poultry farming in changeable market environment, it is necessary to continue specificity research and peculiarities of enterprises functioning and to look for ways to improve its effectiveness.

4. Characteristics of Poultry Farming Development and analysis of industrial and economic activity of poultry enterprises for 1990-2013

Poultry market is developing dynamically at the present stage. In the 90's pork and cattle meat had the highest specific weight in the structure of meat consumption, but gradually poultry formed the main part of meat and meat products market, because there was a significant reduction of beef and pork supply. As a result, a rapid increase in prices on these products has begun, while the price on poultry remained almost unchanged. It became a major factor in changing consumer preferences for dietary poultry [6]. The poultry industry is mobile for application of innovation and investment attraction from various sources, including government sources. This industry differs from other livestock industries with accelerated capital turnover. The increasing of consumer demand for poultry stimulates volume increasing of its production on an industrial basis. Poultry farming in our country is growing rapidly due to the introduction of advanced energy technologies, specialization and concentration of poultry production, poultry productivity increase and reduce of material and monetary expenditures of costs per head.

Table 1 shows the dynamics of poultry stock in all categories of farms in the period 1990–2013.

Table	1
-------	---

Dynamics of poultry stock in all categories of farms for 1990–2013

	Poultry stock				
Year	All categories of	Agricultural enterprises		Households	
	farms,mln. heads	Million heads	Specific weight, %	Million heads	Specific weight, %
1990	246,1	133,0	54	113,1	46
2000	123,8	25,4	20	98,4	80
2005	162,0	66,6	41	95,4	59
2006	166,5	72,2	43	94,3	57
2007	169,3	80,1	47	89,2	53
2008	177,6	88,0	50	89,6	51
2009	191,5	100,4	52	91,1	48
2010	203,9	110,6	54	93,3	46
2011	200,8	105,7	53	95,1	47
2012	214,0	117,8	55	96,2	45
2013	230,3	132,1	57	98,2	43

In the 90's, in connection with the collapse of the Soviet Union agriculture of Ukraine was in a deep economic crisis. It happened so because the country began the transition from planned and administration to market economy. Breaking of economic relations with other countries, changing economic relations between agricultural producers and processing enterprises, imperfect system of pricing and marketing of poultry products, inadequate supply of feed mechanisms and other resources, the lack of targeted state support has led to the fact that the cost of production began to significantly exceed the selling price.

Consequently, the poultry company had to reduce the number of poultry, which in turn led to a rapid decline in the production of poultry products.

In recent years, as a result of measures to stabilize and increase production of poultry products industry is stable and dynamic. Among the main factors that have provided growth in production, it is worth mentioning significant private investments of new owners in technical upgrading and capacity expansion of poultry enterprises, quality improvement of breeding resources, modern management and government support. The revival of poultry farming sector starts, the growth of stock is observed and consequently production increase of poultry products. During the period 2000-2013 the total number of poultry increased almost in a half. In 2013 its quantity in all categories of farms was 230,3 million heads, 132,1 million heads were in agricultural enterprises ,and households had 98,2 million heads. The largest share in stock structure in 2013 has agricultural enterprises - 57,36 %, and households -42,64 %, that almost reaches the level of indicators in 1990, when the number of stock reached 246,1 million heads, specific weight of agricultural enterprises was 54,04 %, specific weight of households was 45,96 %

respectively. In 2000 the situation was quite the opposite: the specific weight of agricultural enterprises was around 20,52 % in the structure of livestock, and households – 79,48 %, the number of stock reached the index of 123,8 million heads.

In general, the structure of poultry distribution in the regions of Ukraine is very stable. Poultry farming is mainly concentrated around major metropolitan cities. This system takes into account the specifics of the distribution of poultry production and focus on the big markets [6].

Phases of active development and formation, because of which poultry market has gone in 2000–2013, turned poultry farming into the dominant not only in the livestock but also in agriculture of Ukraine as a whole. Due to increasing the number of birds the increasing production of poultry products was held, namely poultry and eggs. In the picture 1 we can see that after 1990 the volume of poultry production is reduced, and the lowest value was reached in 2000. But since 2000, there has been a rapid increase in production in the agricultural enterprises and from 193,2 thousand tons to 1168,3 thousand tons in 2013, which in turn is also higher than the index in 1990, which was 708.4 thousand tons. While in households indicators remain almost at the same level for the entire study period.

In recent years, for further production increase poultry producers will have to solve a number of problems such as reduced purchasing power, high prices of food, development and active lobbying of pork producers, difficulties with the development of export markets and so on. In addition, increasing competition between direct producers will significantly influence on the market in the near future [6].

Meat production in slaughter weight in Ukraine for 1990–2013 is shown in Table 2.

Table 2 Meat production in slaughter weight in Ukraine for 1990–2013

	1990	J=2013			
	Production of meat (slaughter weight), tons				
Year	All categories of farms, thousand tons	Agricultural enterprises	Households		
1990	708	357	351		
2000	193	36	157		
2005	497	320	177		
2006	589	418	171		
2007	689	527	162		
2008	794	635	159		
2009	894	711	183		
2010	953,5	772	182		
2011	995,2	811	1 84		
2012	1074,7	868	207		
2013	1168,3	966	202		

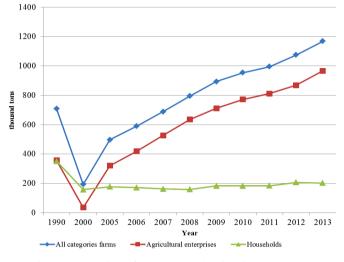


Fig. 1. Dynamics of poultry production in slaughter weight in Ukraine for 1990–2013

In fact poultry farming has significant economic development potential. The main factors that provide increasing profitability of poultry production in the company of any ownership, is to increase the productivity of poultry and reduce material and monetary costs per head. Feeding is the most important factor among all environmental factors that affect the level of poultry productivity. Sufficient and nutritious bird feeding is the foundation of stability and increase in efficiency. The solving of this problem is possible on the basis of scientific and technological progress achievements, the introduction of advanced technologies of fodder production and rational forms of work organization. Feeding system, its usefulness requires not only a sufficient amount of feed and balanced diet for the nutrients, but also economic justification of feeding types. For every animal species acertain type of feeding is stipulated.

With the expansion of the range of feed rations, and especially with the increase of expensive feed in their share, the cost of feed unit can be greatly enhanced. However, higher prices caused by improved biological value of forages, positive impact on poultry productivity, its cost, easily compensated by additionally obtained products.

Herd reproduction system and duration of bird use is very important. Hens should be used in the production of eggs throughout the year. Replacement should be done in improving breeding and productive qualities of livestock. Hybrid bird not only improves productivity, but also it is more resistant to disease, has a longer term of egg production.

An equally important factor in improving the efficiency of feeding is full dry and granular fodder, which include essential nutrients, vitamins and minerals. The system of poultry confinement affects the work productivity and the cost of production. On small poultry farms poultry is kept in cages and in bulky housings on deep litter, plank and net floor instead of keeping them on exercise yard. Using a multi-tiered system of hens keeping allows to place 4–5 times more birds on a unit of production area than in any other system. The cost of feed on egg production reduces by about 10 % in comparison with the costs of floor storage.

As a disadvantage there is a need to move the bird from cage to cage with its growth. That is why technology of hen growing in multi-cellular batteries needs to be improved in order to use direct bird keeping.

5. Results of the study

One important factor for further development of Ukraine is the development of the poultry and eggs market. In recent years, the share of poultry production produced by agricultural enterprises increases in a remarkable pace. Most of the companies in the region have begun to work steadily, and want to strengthen their own economic situation attracting customers through the continuous quality improvement and the search for ways to reduce the product prices. We believe that in order to achieve high goals the introduction of scientific and technological progress and effective resource-saving technologies are required, and this will give an opportunity to improve the competitiveness of enterprises in the field of domestic and foreign markets. Regulation of the market of poultry products should be done with the help of government instruments, and with the participation of business entities. With the combined effect of these instruments it is necessary to create a system that would meet the requirements of public policy and a positive impact on the functioning of the market in the area. One way to improve the efficiency of the small size of poultry farms is the creation of production and marketing cooperatives, the purpose of which is to collaborate with companies that produce tools for the production of poultry products (equipment manufacturers, veterinary products, premixes and food supplements, etc.). Created cooperatives within the community act on non-profit basis. This allows the founders of the community to reduce the cost of intermediaries, which in turn will affect the cost of production. The cooperatives collaborate with other companies; they buy the necessary materials and with no extra charge supply their poultry farms. Thus, with the help of cooperatives that are seeking for cooperation partners poultry enterprises are able to pay more attention to the output of products to foreign markets and to develop a strategy for the effective functioning of the poultry sector. Creation of integration system using business entities can be one of the areas of implementation of the program of poultry transition on the basis of innovation. Thus, the characteristic feature of the integration processes in the poultry sector should be to build the production cycle, from the incubation (in egg poultry farming) and selection (in meat poultry farming) and complete the implementation of the final finished product. It is necessary to carry out the production concentration of day-old chicks and eggs incubation for further rearing of poultry meat and egg direction, production of high quality feed, broadening the range of poultry products, the implementation of the final products to consumers through its own channels. The main direction of increasing the enterprises efficiency in the region is to reduce production costs. The level of cost is affected by several factors, including retention of the birds, the cost of day-old chicks, feed, veterinary products, equipment, energy, etc. Therefore, to reduce the production cost it is necessary to reduce the level of production costs. This can be achieved by optimizing them. With the help of innovative processes in the field the cost of poultry meat and eggs will decrease, the product competitiveness and production capacity will increase, which will make it possible to achieve world-class production and consumption of poultry products. In this case international trade and cooperation will develop in more progressive way, a state support will become more active, and favorable economic conditions with the help of credit, financial and tax regulatory factors will form.

In a market economy, the development of the poultry sector should be based on large industrial type of technological production, which has significant advantages such as the use of advanced energy-saving technology, specialization and concentration of production, the implementation of purposeful selection using highly cross poultry and balanced food base for comprehensive mechanization and automation of production processes. Also, the industry constantly needs new and innovative investments, acquisition and application of advanced modern technology to ensure the competitiveness of poultry products in the domestic and global markets. It requires the development and implementation of government programs subsidizing farming and production equipment for the industry, the use of tax reliefs and credits. Further production increase of poultry meat and eggs is only possible on the assumption of flexible and transparent government support towards the creation of a favorable investment climate in the sector [1].

6. Conclusion

Poultry is one of those sectors of agriculture, the development of which allows rapidly improve the growing demand for high quality food products of animal origin. The rapid development of the poultry meat and egg for several previous years was the result of fundamental changes in market conditions, as well as the mechanisms of state regulation of the sector. But despite the positive trends in poultry enterprises a number of problems still exist, such as instability of government support, pricing, tax burden, lack of food supply, poor products quality and more.

To solve the problems it is necessary to ensure poultry farms with complete and balanced animal feedstuffs, reducing material and cash costs per one head, increasing the number of all kinds of birds, breeding and introduction of new cross hens of egg direction; greater specialization and concentration, which allow you to apply scientifically based production technology, which improves productivity, reduces costs of feed, the cost of eggs and poultry meat; incentives for increased and break-even production producers of various forms of economic activity; incentives to improve production efficiency and product quality in small-scale and cooperative formations; application of technical regulations, production and processing of poultry products.

The study of economic efficiency of poultry production in the agricultural enterprises allowed making such conclusions and developing recommendations concerning its improvement.

1. Poultry farming is a promising industry in which over the last five years the upward trend in gross production was outlined. Several factors affect the volume increase of poultry production; the main ones are economic, organizational, technological, industrial, biological and social. Growth in poultry production under the optimization of cost production promotes economic efficiency area.

2. The essence of the organizational and economic mechanism of effective development of the poultry sector is come to a set of interrelated organizational and economic instruments that have the greatest impact on the production of poultry products, as well as the formation of supply and demand in the market. The development of this mechanism provides the implementation of state regulation aimed at creating favorable conditions for the functioning of poultry products market, the determination and justification of the priorities of the region, improvement of methods for managing reproduction in agricultural production.

3. Progressive changes took place due to the rapid development of the poultry sector in the specialized agricultural enterprises, thus the region was transferred into industrial basis. There is a tendency to reduce the volume of production in the households, which indicates a decrease in their role in solving the problem of providing consumers with poultry products.

4. Demand for poultry meat is the least sensitive to seasonal fluctuations, as it in its consumer properties belongs to the category of "light" meat. However, consumer demand for poultry meat is satisfied at 104,8 %. Products are sold through wholesale markets, retail stores, trays.

Prices of poultry products in retail trade over the past five years have increased the least of all in comparison with other types of meat, which allows businesses to increase the presence in the food market in the area.

5. The main directions of increasing the economic efficiency of poultry production are establishing integration links in the poultry subcomplex. In our opinion is the integration of small-sized enterprises in the community poultry farmers is urgently needed, the operation of which occurs through cooperatives by the community members. Cooperatives activity comes to cooperation with other companies that are suppliers of the means of production for poultry enterprises integrated into the community. The creation of cooperatives will enable poultry farms to purchase materials for the production of poultry products without intermediaries, thereby reducing the cost of their own products. Thus, by combining the community, small in size unprofitable farms of poultry sector will be able to solve effectively a number of production problems.

6. Substantial increase in poultry meat production can be achieved through investment flow, which determines the need to create favorable investment climate. This should contribute to a stable, predictable government policy to support domestic producers in credit, price and budgetary spheres of government. Effective investment activity largely depends on the investment, industrial, information, intellectual and natural potentials, as these factors will always have the main selection of objects for investment.

7. The use of innovative technology of discontinued (normalized) birds feeding reduces feed consumption by 10 %, water – by 40–70 % and electricity – by 50 %. As a result of periodic (physiologically sound) stop the flow of water in the drinking bowls and power, the conditions for a better feed conversion are created and growth of broilers is increased. With the help of this technology, the growth in gross production of poultry meat and sales volume are achieved, reduces the cost of poultry, which provides revenue growth and profitability.

References

1. Prysyazhnyuk, M. V. Agricultural sector of Ukraine (state and prospects) [Text] / M. V. Prysiazhnyuk, M. V. Zubets, P. T. Sabluk etc.; eds. M. V. Prysyazhnyuka, M. V. Zubtsya, P. T Sabluka, V. Y. Mesel–Veselyaka, M. M. Fedorova. – Kiev: NNC IAE, – 2011. – 1008 p.

2. Kopytets, N. G. Real poultry [Text] / N. G. Kopytets // Meat business hooves. - 2008. - Vol. 4. - P. 100-107.

3. Stefaniv, O. B. Some aspects of the market supply of poultry products in Ukraine [Text] / O. B. Stefaniv // Scientific thematic collection of "Poultry". – 2009. – Vol. 64 – P. 36.

4. Shchetinina, I. O. The value of innovation for poultry. Current status of poultry production in Ukraine and prospects of development [Text] / I. O. Shchetinina, V. I. Dyachenko. – Poultry research Institute, 2009. – P. 32–38.

5. Tereshchenko, O. V. Ukraine and worldwide market trends breeding poultry [Text] / O. V. Tereshchenko, A. A. Katerynych, A. V. Rozhkovska // Scientific thematic collection of "Poultry". – 2009. – Vol. 63. – P. 26–36.

6. State Statistics Service of Ukraine [Electronic resource] / Available at: http://www.ukrstat.gov.ua

References

1. Prysyazhnyuk, M. V., Zubets, M. V., Sabluk, P. T., Mesel-Veselyak, V. Y., Fedorov, M. M. (2011). Agrarnyi Sector ekonomiky Ukrainy (Stan i perspektyvy rozvytku). NSC IAE, Kyiv, 1008.

2. Kopytets, N. G. (2008). Rynok myasa ptytsi. Myasnyi biznes, 4, 100–107.

3. Stefaniv, O. B. (2009). Deyaki aspekty formuvannya propozytsiyi na Rynku produktsiyi ptahivnytstva v Ukrayini. Mizhvidomchyi naukovyi tematychnyi zbirnyk "Ptahivnytstvo", 64, 36.

4. Shchetinina, I. O., Dyachenko, V. I. (2009). Znachennya innovatsiynogo rozvytku dlya ptahivnytstva. Suchasnyi Stan vyrobnytstva myasa ptytsi v Ukrayini ta perspektyvy rozvytku. Instytut ptahivnytstva UAAN, 32–38.

5. Tereshchenko, O. V., Katerynych, A. A., Rozhkovska, A. V. (2009). Ukrayina i svitovi tendentsiyi rozvytku pleminnogo ptahivnytstva. Mizhvidomchyi naukovyi tematychnyi zbirnyk "Ptahivnytstvo", 63, 26–36.

6. State Statistics Service of Ukraine. Available at: http://www.ukrstat.gov.ua

Рекомендовано до публікації д-р екон. наук Вініченко І. І. Дата надходження рукопису 25.03.2015

Makhovsky Dmitry, Postgraduate student. Department of Economics and Agricultural Economics, Dnipropetrovs'k State University of Economics and Agriculture, Voroshylov st., 25, Dnepropetrovsk, Ukraine, 49600

E-mail: makhovsky_dima@mail.ru

УДК 656. 614.3.076.3 DOI: 10.15587/2313-8416.2015.40773

ОПТИМИЗАЦИЯ ИСПОЛЬЗОВАНИЯ ФРАХТОВОГО РЕСУРСА ДЛЯ ФОРМИРОВАНИЯ НАЦИОНАЛЬНОГО ФЛОТА

© Н. В. Судник, С. П. Онищенко, С. И. Рылов

В центре внимания данной статьи – проблема возрождения национального морского флота посредством поэтапной аренды судов в бербоут-чартер с последующим переходом прав собственности. Для оптимизации такой программы возрождения флота разработана экономико-математическая модель, в качестве источника финансирования предлагается использование «фрахтового ресурса», методика обоснования которого представлена также в данной статье

Ключевые слова: национальный флот, тайм-чартер, бербоут-чартер, фрахтовый ресурс, суда, приобретение