

# SUBSTANTIATION OF COMPETITIVE STRATEGIES FOR THE DEVELOPMENT OF POULTRY INDUSTRY IN UKRAINE

Olesya Gavrik<sup>1</sup>, Natalia Homyak<sup>2</sup>

Bila Tserkva National Agrarian University<sup>1,2</sup>

Department of accounting and taxation,

pl. Soborna 8/1

Bila Tserkva, Ukraine

e-mail<sup>1,2</sup>: gavrik\_olecya@ukr.net, nvh878@ukr.net

## Abstract

*The purpose of the article is to determine the intensity of competition on the eggs and egg products market, to systematize consumer requirements for egg products, to justify strategies for the formation and strengthening of the competitive advantages of products in the domestic and foreign markets.*

**Keywords:** *competitive strategy, competitive advantages, industrial poultry farming, egg products, marketing tools.*

**JEL Classification:** Q 18, M 11

## 1 Introduction

Egg poultry farming in Ukraine is the most dynamic livestock industry, which, regardless of the season, using high-performance crosses, new resource-saving technologies, balanced diets, is able to produce products in large volumes and in the shortest possible time. A characteristic feature of the current stage of egg market development is the intensification of competition, which necessitates the enterprises of the investigated branch to substantiate strategies for ensuring stable positions on target segments in order to more fully meet the consumer demand for poultry products of the required quality, volume and range. It should be noted that in the production and trade of egg poultry products, the uncertainty of the effects of both external and internal factors, the multilevelness of sales channels, increased competition and over-consumption of the domestic market remain.

That is why the issues related to the substantiation of the strategic priorities of the development of the poultry industry are relevant.

## **2 Data and Methods**

When writing the article, official statistics were used, reports from individual agricultural enterprises producing eggs, author's own research, processing of which was carried out by economic, statistical and analytical methods of research, ABC analysis - in assessing consumers and the product range in order to identify areas for strengthening competitive advantages on the market egg products, methods of marketing research, methods of expert evaluations, personal observations of the author and others.

## **3 Results and Discussion**

In 2016, all categories of farms in Ukraine produced 15.1 billion units. eggs, which is 10% less than the level in 2015, including agricultural enterprises - by 1694.6 million, while households increased by 12.1 million units. The bird population in all categories of farms as of January 1, 2017 decreased by 2.3 million heads compared to January 1, 2016, including 2.2 million in agricultural enterprises, and 0.1 million in households the heads This circumstance is caused by a decrease in the volumes of exports of eggs and egg products. So, domestic agricultural producers in 2016 exported eggs in the shell for 45.49 million dollars. The USA is 1.7 times less than a year earlier. According to its data, exports in kind declined by 14.5% - to 50.68 thousand tons compared with 2015.

Export of dry and liquid egg products increased in 2016 - by 7.8%, to 3.57 thousand tons, in monetary terms, decreased by 1.6 times to \$ 29.87 million. This is due to cases of avian influenza recorded in south-western regions of the country in December 2016 - January 2017. For certain objective reasons, export of eggs to Israel was prohibited. There was also a lost Iraqi market, which accounted for almost 50% of foreign supplies in 2015. The reason was the escalation of the conflict and the problem with the intersection of the Turkish-Iraqi border.

In addition, that decline in purchasing power led to a decrease in the consumption of eggs. Thus, consumption of eggs per person per year in 2016 in Ukraine amounted to 267 pcs. at a rational norm of 280 pcs. and that lower by 5% in 2015. [1]

As a result of the forced reduction in the number of poultry in the corporate sector of the agrarian economy (some livestock farms were planning unsuccessfully slaughtering of poultry to minimize losses) and due to increased exports,

they managed to reduce the supply of eggs in the domestic market. In January-October 2017, Ukraine exported 71.52 thousand tons of eggs against 50.68 thousand tons last year.

An important factor that has led to a decrease in the production of eggs in Ukraine, in particular by agricultural enterprises, is more than a hundred times lower profitability of egg production: from 60.9% in 2015 to 0.5% - in 2016.

Reduced profitability is the result of lower prices and higher costs. If in egg poultry farming costs increased by 63.3% compared to 2014, with an increase in egg prices by 64%. In 2016 there is an increase in costs by 23%, with a price drop of 9% [2]. The main factor of rising costs is the increase in the cost of the main types of grain crops from November 2015 to February 2016 by more than 50%. As in the cost price of poultry production, the share of feed is 60-65%, then, accordingly, this factor led to its increase. Influenced the industry and devaluation of the hryvnia negatively. In the foreign market, there is a tendency to decrease the export price. In particular, over the past 6 years, the average export price has decreased by 3.1%, the average price of fresh eggs in a shell, which is exported from Ukraine, in January-October 2017 amounted to \$ 721 per ton. In terms of the UAH equivalent of about 12-13 UAH per ten [3].

According to the results of the conducted research 79 agricultural enterprises, or 51.6% of the total number of egg producers, in 2016, were damaged by the sale of egg poultry products. They occupy about 50% of the sales structure (Table 1).

**Table 1 Grouping of agricultural enterprises by the level of production and marketing of egg poultry production**

<b>Groups by profitability, %</b>	<b>Number of households in group</b>	<b>Implemented, thsd.</b>	<b>Share of sales group, %</b>	<b>Productivity, pieces</b>	<b>Production cost 1 thousand UAH</b>	<b>Salesprice, UAH, per 1 thsd</b>	<b>Profitability, %</b>
<b>before -40</b>	34	101,7	1,4	181	1804,38	1087,96	-37,7
<b>-20</b>	12	245,6	3,5	209	1251,37	949,40	-21,0
<b>0</b>	33	3113,1	44,2	184	1181,85	1119,08	-12,0
<b>Loss-making</b>	79	3460,5	49,2	186	1208,48	1106,13	-13,7
<b>20</b>	51	2849,9	40,5	265	934,48	1141,40	15,9
<b>over 20</b>	23	727,1	10,3	302	912,30	1051,49	35,9
<b>Profitable</b>	74	3577,0	50,8	272	929,78	1123,13	19,2
<b>of all</b>	153	7037,5	100,0	222	1064,76	1114,77	0,5

The largest egg and egg producer in Ukraine, Avangard agroholding, in 2016 gained 56.6 million dollars. Net loss, which is almost three times less than in 2015.

According to a company report on the London Stock Exchange website, the company's revenues last year dropped by 17% compared to 2015 - to \$ 191.3 million. Gross profit "Avangard" in 2016 decreased by 40% - to 13.2 million dollars.

In the reporting period, the operating loss of the holding decreased by 5.8 times and amounted to \$ 14.9 million. Avangard reduced revenues from exports by 29.9% to \$ 66.7 million. At the same time, the share of export earnings in the net income of the holding was reduced to 35% from 41% in 2015.

However, 74 farms of the corporate sector of the agrarian economy - producers of eggs at the expense of domestic reserves, in particular higher productivity of hens - bearers, lower level of cost, ensured the profitability of production economic activity.

A rather important factor in ensuring the profitability of productive and economic activity is a reduction in the price level when sales volumes increase, which is characteristic of the 5 groups of agricultural enterprises. In our opinion, these entities also include the enterprises of the corporate sector of the agrarian economy, which are part of the company Ovostar.

Companies are starting to fight for the share of the domestic market. Manufacturers are actively engaged in the diversification of sales markets. Such actions helped Ovostar reduce the average sales price by only 15%.

According to the results of 2016 the company reduced Ovostar's net profit by 1.8 times compared to 2015 - to 12.219 million dollars. USA. The revenue of "Ovostar" increased by 1.7% - to 53.665 million dollars. In the United States, gross profits declined by 26.3% to USD 16.26 million.

A characteristic feature of egg production in agricultural enterprises is the high level of its concentration. During 2012-2016 there was an increase in the level of monopolization of the poultry market. Thus, in 2012, more than 90% of the eggs were occupied by 47 agricultural enterprises, in 2016 - 29 (Table 2).

**Table 2 Grouping of agricultural enterprises according to the volume of sales of eggs**

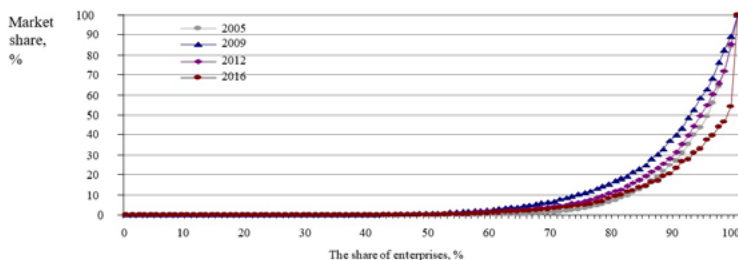
Groups by volume of sales of eggs, thousand pcs	2012			2016		
	Number of households in the group	Group share in implementation, %	Profitability, %	Number of households in the group	Group share in implementation, %	Profitability, %
<b>before 1</b>	84	0,09	-28,0	75	0,2	-18,0
<b>10</b>	44	1,87	-5,9	26	1,9	1,6

Groups by volume of sales of eggs, thousand pcs	2012			2016		
	Number of households in the group	Group share in implementation, %	Profitability, %	Number of households in the group	Group share in implementation, %	Profitability, %
20	13	1,65	-0,4	12	2,5	1,0
50	17	5,21	-2,0	11	5,9	9,4
250	30	30,86	28,1	26	39,4	4,2
more 250	17	60,31	78,0	3	50,1	-2,8
all	205	100,00	52,6	153	100,0	0,5

Farms of the corporate sector of the agrarian economy 6-7 groups are, in our opinion, the main players in the market for egg poultry production, in particular the Ovostar Union group of companies, Agroholding Avangard, Inter-Agrosystems, Lundhut Ukraine

We have determined the concentration index for the three largest poultry farms in the egg sector (by volume of sales). Thus, in 2005 three enterprises sold 12.4% of all eggs, in 2012 - 20.3%, and in 2016 - 50.1%, which indicates an increase in the concentration and monopolization of the market. For the sake of clarity, we will construct a Lorentz curve that reflects the uneven distribution of any sign, for the case of the concentration of vendors on the market and shows the relationship between the percentage of enterprises in the market and the market share, calculated on the rising sum from small to large commodity producers (Figure 1).

Figure 1 **Lorentz curve of distribution of concentration of poultry enterprises in the market of eggs (1 straight line for absolutely uniform particle distribution, 2 - curve line - actual Lorentz curve)**



Source: Calculated by the author.

We have systematized opportunities and strengths, threats and weaknesses for the domestic egg poultry industry based on the SWOT analysis (Table 3).

**Table 3 SWOT-analysis of the development of marketing activities of enterprises in the egg market**

Opportunities	Threats
<ol style="list-style-type: none"> <li>1. Promising development by increasing the competitiveness of products on the basis of modernization and development of traditional and new brands.</li> <li>2. Use of the advantages of the geographical location of the country.</li> <li>3. Effective use of resource potential in poultry farming.</li> <li>4. Obtaining synergistic effect from the development of vertical integration in egg poultry farming.</li> <li>5. Creation of additional workplaces with expansion of capacities</li> </ol>	<ol style="list-style-type: none"> <li>1. Seasonal production and consumption of egg poultry products.</li> <li>2. Strengthening of the signs of financial instability in the vast majority of small poultry farms.</li> <li>3. Increasing competition from agroholdings.</li> <li>4. The threats of bankruptcy for 124 small and medium-sized poultry farms.</li> <li>5. Lack of the mechanism of insurance of industrial risks.</li> <li>6. High risk of spreading of viral and infectious diseases.</li> <li>7. There is a high probability of manifestations of manipulative actions of producer leaders in the market regarding the level of prices</li> </ol>
Strengths	Weak sides
<ol style="list-style-type: none"> <li>1. Favorable climatic conditions of the development of the industry for growing fodder grain.</li> <li>2. Availability of a full range of domestic forage crops for the development of poultry farming.</li> <li>3. Availability of highly skilled personnel in the industry.</li> <li>4. There is a significant potential for the production of dietary and table eggs and their processing products.</li> <li>5. Possibility of deep processing of eggs and expansion of the product range.</li> <li>6. Use of innovative technologies.</li> <li>7. Lobism of state authorities.</li> <li>8. Development of vertical integration in the industry.</li> <li>9. Favorable geographic location, developed transport infrastructure</li> </ol>	<ol style="list-style-type: none"> <li>1. Low development of complex processing of technological waste (feather, shell eggs, poultry litter) for the purpose of obtaining various products of forage, medical and technical purposes.</li> <li>2. Insufficient provision of feeds of own production.</li> <li>3. Unsuccessful state of breeding work and ensuring the conservation of bird's stock.</li> <li>4. Lack of development of the marketing, sales and advertising system.</li> <li>5. Difficulties in ensuring compliance with national quality and safety standards internationally.</li> <li>6. Strengthening the market monopolization of eggs and egg products.</li> <li>7. Insufficient resolution of the problem of bird droppings disposal.</li> <li>8. The deterioration of social conditions of poultry workers, social consequences of the closure of small poultry farms.</li> <li>9. Ecological threats from the concentration of poultry</li> </ol>

Source: Summarized by the author.

In the segment of fresh eggs, a high degree of standardization, the brands of different commodity producers are almost identical, the big difference between them is not seen by consumers. The loyalty of the brand is most affected by the "locality" factor of the origin of the commodity producer. The segment of fresh eggs can be attributed to monopolistic competition with a wide range of products, a large role of marketing tools such as brand, packaging, marketing methods, and the segment of egg products to the oligopolistic market, which also plays an important role in the competition is a marketing complex [4].

Economies of scale on the market are modest, as all companies have virtually identical production and sales costs.

The consumer's loyalty to the brand on the market for fresh eggs is very low. An important factor in the choice of a commodity producer is the price, further with a large margin factor of the "locality" of the commodity producer.

In the near future, it is likely to predict the growth of competition in the industry, as growth in output will surpass demand growth.

In the conditions of slowing the growth of demand, uniformity of the commodity position and the absence of the possibility of emerging competitive advantages at the expense of marketing tools, as a way to strengthen their competitive positions, the main commodity producers can use the following strategies: the absorption of small commodity producers or mergers with equal opportunities and competitive force; search for new market segments.

The impact on competition in egg poultry production of new commodity producers, that is, those entering the market, will be examined on the basis of separate characteristics of this force: economies of scale in the industry are not significant, the share of constant costs is relatively small, to obtain savings on the purchase of the main raw materials (grain group, sortoids of oilseeds) is impossible because they are a classical commodity; free access to technology makes this factor insignificant; low customer loyalty to brands simplifies the process of reorienting the end user; the price is an important factor in the choice of a particular brand by the buyer, so new producers are actively using the dumping policy when bringing their brands to the market; access to the distribution channels for new commodity producers may be complicated by the already established relationships with egg suppliers.

Taking into account the above-mentioned factors, as well as slowdown of consumption growth and strengthening of monopolization, the factor of competition of new commodity producers should be considered to be low in value.

It is possible to carry eggs of other types of poultry to substitute products. Given the lack of traditions of widespread demand for these products, the lack of

awareness of the population about them, their impact on the market for chicken eggs is insignificant.

Chicken eggs are the most available of all kinds, and the degree of exposure of substitutes to the B2C market is practically absent. However, it can increase in the B2B market in the conditions of significant increase of prices and search for commodity producers to reduce the cost of their products.

Regarding the competitive force of suppliers, it is necessary to consider that individual components of feed ingredients are imported, which requires the establishment of competitive logistics; the main component of feed is a grain group that is characterized by high demand in the foreign market, there is an instability of prices throughout the year. The above shows the significant influence of the factor considered by us.

Competitive strength of customers has the following characteristics: the concentration of buyers in the market is poorly expressed, since sales are too differentiated. However, over the last few years there has been a tendency towards a decrease in the total number of buyers due to increased supply to several large suppliers. First of all, this is due to the active development of retail chains and the exit from the market of small and inefficient [5.]. Terms of work with wholesale and retail networks are increasingly complicated, which affects the sales efficiency of commodity producers. Probably this trend will continue in the near future, which will increase the negative impact of this factor.

As is known, in the segment of fresh eggs, the product is not sufficiently differentiated, the buyer easily moves from consumption of one brand to another. In egg processing segments, the use of such marketing tools as branding and the proper management of the product range can contribute to increased customer loyalty. The factor of buyers can be attributed to the average for weight.

An analysis of the competitive environment of the commodity producers' activity of the branch we examined identified the following possible strategies of behavior in the market: active policy in the market of mergers and acquisitions; an increase in the share in advanced markets for egg processing; further diversification of sales; strengthening the marketing activity of commodity producers.

Let's consider the main driving forces and their influence on the competitive environment in the field of egg poultry farming. First, it is the introduction of new products. Despite the fact that the investigated industry does not belong to innovation, commodity producers are oriented towards expanding assortment at the expense of well-known abroad production, but which have not previously been used in domestic practice: egg production, "biosaites", feed for poultry, bio-gas and organic fertilizers on the basis of chicken litter. The novelty of the segment



involves a higher rate of return for the enterprises that will be the first to come out of it. Accordingly, this may be an additional competitive advantage.

Secondly, the change in the system of marketing tools. Increasing monopolization in the market leads to an increase in marketing budgets. Part of the egg and egg producers are investing in branding, others are active in advertising campaigns and regular BTL- events. Even advocates of conservative marketing strategies recognize the need for increased marketing activity. This is very important in egg processing segments, where marketing factors play an important role.

Thirdly, a change in public values and lifestyles. With the growth of the welfare level, Ukrainians will pay more and more attention to a healthy lifestyle. The right theme for healthy life in the position of importance and the need to eat eggs and egg products can be an additional competitive advantage. However, account should be taken of the negative effects of the global financial crisis and manifestations of the signs of the crisis in the domestic economy. In general, consumers' well-being may decrease, which may lead to lower incomes and a change in the structure of consumption towards cheaper products.

Fourth, the change in the long-term trends in the sector's economic growth. Since the segments of fresh eggs are in the transitional stage of the life cycle - from maturity to saturation, the long-term trend is to slow down the growth of the industry, which will lead to the crowding out of small, inefficient commodity producers, further consolidation of holdings and redistribution of the market in favor of more efficient companies.

The influence of all other factors on the change in the structure of the competitive forces is much smaller.

The characteristic features of the Ukrainian market of egg products can be called: the market is not sufficiently saturated by domestic products, due to the low level of quality of certain types of products (for example, albumin). Experts estimate that segments of egg products have significant potential for development; With the growing competition, the role of branding will grow; most commodity producers are inert in shaping the new needs of B2B market consumers by producing innovative products or original positioning ideas that will shape opportunities for the development of new market segments.

Consequently, the current market situation is characterized by a high level of competition and the positioning of the market as saturated with growing export orientation and the emergence of periodic risks of overfishing. In these conditions, with fairly intensive production, the competitive advantages of poultry farms can be formed and maintained exclusively through increased marketing, which requires the adaptation of scientific approaches to the assessment and forecasting of demand, pricing, consumer motivation, and the introduction of

marketing strategies. Note that small regional and local egg producers are not observed complex approaches to the use of a set of marketing tools.

In the study of purchasing power of consumers in the market for fresh eggs, it was found that about 90% of respondents are satisfied with the range offered in retail trade. Most consumers prefer selected eggs (56.3%) and the first (31.2%) categories, regardless of diet or table eggs (68.0%). Respondents (55.3%) do not care about the color of the shell, 18.6% of the respondents only buy brown eggs, 10.9% - only white. The vast majority of respondents agree to buy home and with different biological additives for eggs.

It is established that in the domestic market, with the position of such products as chicken eggs, the idea of healthy eating is actively used - practically by all manufacturers on the market. Leaders such as "Avangard" and "Ovostar Union" offer consumers eggs enriched with omega-3 fatty acids or iodine. However, it should be noted that the share of branded egg products in the market is very small, among distinguished consumers of brands it is possible to distinguish the TM From Good Chicken (Lundhut Ukraine), TM Yasensvit (Ovostar Union), TM «Kvochka» (company "Avant-guard") [6].

One of the most important elements of the marketing complex is price policy, as a set of measures and strategies for managing prices and pricing, setting goods for such prices, which correspond to the costs of production and promotion of goods, market conditions and provide profit to the enterprise [7].

Based on the foregoing, we substantiated the competitive strategies of the main producers of chicken eggs and egg products (Table 4). The evaluation of marketing activities of leading poultry farming holdings shows that they all try to manage the marketing complex through specialized functional units, while others concentrate marketing efforts only on sales organization. At the same time, the research of the market for eggs and egg products, the study of the behavior of competitors is practically not involved in the marketing system, not to mention market strategies and tactics of competition. As a result of this, there are significant financial losses of poultry enterprises during the seasonal peaks, changes in the purchasing power of the population and the re-loading of commodity flows.

**Table 4 Characteristics of competitive development strategies in the market for egg poultry production by individual commodity producers**

<b>Poultry enterprises</b>	<b>Strategic priorities</b>	<b>Goals to achieve market share</b>	<b>Competitive position</b>	<b>Type of strategy</b>	<b>Competitive strategies</b>
<b>Avangard Company</b>	Leader in the field	Aggressive expansion through the acquisition of other commodity producers and domestic growth	Strong position	Mainly offensive	Focusing on national and regional sales, targeting a wide range of consumers
<b>Inter-AgroSystems Company</b>	Enterprise with a strong position	Increasing and maintaining the existing market share	Increasingly	Mainly offensive	Focusing on market niches of consumers with different levels of income, product differentiation, image enhancement, reputation and quality
<b>Ovostar Company</b>	Enterprise with strong position	Increase and maintenance of existing market share	Well protected and strengthened	Mainly offensive	Focusing on market niches of consumers with different income levels, differentiation of commodity offer based on deep processing of eggs, image, reputation and quality
<b>Company "Lundgut Ukraine"</b>	Enterprise with a strong position	Retaining the existing market share	Tries to strengthen its position	Combined strategy of defense and offensive	Orientation to a wide range of buyers, focusing sales in the region

Source: Compiled by the author.

Consequently, egg poultry farms, which have retail outlets in cities but without self-processing eggs, are cost-effective, can use such price strategies that enable them to strengthen their competitive position in the market and increase their income. The latter can use the implementation of such strategies as "penetration", "price alignment," "accelerated return of funds." However, the lack of self-processing of agricultural products, which is typical for most agricultural enterprises, constrains access to the food market, allowing them to consolidate only in limited segments. The limited supply of goods and the saturation of the market forces these companies to sell to a broker or a processing enterprise or to enter into the integration structures, performing the role of "milk cow".

## 4 Conclusions

Thus, the operation of Ukrainian poultry enterprises on the target segments of eggs and egg products requires taking into account the fact that the market is constantly developing dynamically. In order to adapt to changes in market conditions and to continue the successful operation of the enterprise, it is necessary to take into account numerous factors at all stages of marketing management and provide a flexible adaptation of the enterprise to their changes. The manifestation of adaptation of enterprises to changes in the factors of the functioning environment are marketing tools, among which the important place is given to product strategies, ensuring product compliance with market requirements, marketing communications, which contribute to the growth of sales.

The main areas of the formation of competitive advantages by egg poultry enterprises are: introduction of new products. (egg production, "biosaites", poultry feed, biogas and organic fertilizers based on chicken manure); activating instruments for the formation of demand and stimulation of product sales; taking into account the changing behavior of consumers, in particular, a healthy lifestyle; taking into account changes in the long-term trends in the development of the industry (since the segments of fresh eggs are in the transitional stage of the life cycle, from maturity to saturation, the long-term trend is to slow down the growth of the industry, which will lead to the crowding out of small, inefficient commodity producers, further consolidation of holdings and redistribution of the market to the benefit of more efficient companies.

## References

1. DIDENKO, S. V. (2012). Sy`stemny`j pidxid do upravlinnya markety`n-govoyu diyal`nistyu ptaxivny`chy`x pidpry`yemstv[The system approach

- to the management of marketing activities of poultry enterprises]. *Visny`k Xmel`ny`cz`kogo nacional`nogo agrarnogo universy`tetu. Bulletin of the Khmelnytsky National Agricultural University*, (6), p. 80-84.
2. MAVRINA, A. O. (2009). Ocynuvannya efekty`vnosti markety`ngovy`x zaxodiv [Evaluation of the effectiveness of marketing activities], *Visny`k nacional`nogo universy`tetu «L`vivs`ka politexnika»*, Bulletin of the National University "Lviv Polytechnic. (640), p. 334-341.
  3. Oglyad ry`nku yayecz`. [Eggs Market Overview]. Retrieved from [http://www.ait-magazine.com.ua/sites/default/files/gritsenko\\_3.pdf](http://www.ait-magazine.com.ua/sites/default/files/gritsenko_3.pdf).
  4. RUDENKO, M. M. Osobly`vosti kompleksu markety`ngu ptaxivny`chy`x pidpry`yemstv. [Features of the marketing complex of poultry enterprises]. Retrieved from <file:///C:/Users/%D0%B8%D0%B2%D0%B0%D0%BD/Downloads/8589-17841-1-SM.pdf>.
  5. SENDECZ`KA, S. V. (2017). Doslidzhennya ukrayins`kogo ry`nku yayecz` ta yajceproduktiv. [Research of the Ukrainian market of eggs and egg products]. *Scientific herald of LNUVMB named after SZ* (81), p. 102-106.
  6. Top 15 Exporters Of Eggs In Shell. [Top 15 Exporters Of Eggs In Shell]. Retrieved from <http://www.worldatlas.com/articles/top-15-exporters-of-eggs-in-shell.html>.
  7. VELY`CHKO, O. P. (2015). Logisty`ka v sy`stemi menedzhmentu pidpry`yemstv agrarnogo sektoru ekonomiky`: *monografiya*. [Logistics in the management system of enterprises of the agrarian sector of the economy: monograph]. *Dnipropetrovs`k Dnipropetrovsk*, 525 p.