



Економіка. Проблеми економічного становлення

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Курчилюк О.Ф.,

Candidate of Economic Sciences, Associate Professor of the
Department of Accounting, Analysis and Audit
National University of Life and Environmental Sciences of Ukraine

Strategic guidelines for the quality improvement and the safety increase of poultry products in the context of world food market globalization

The article defines the key problems of domestic poultry industry in the context of world food market globalization. Factors that determine the need of improving the quality provision system and increasing the safety of poultry eggs and meat are established. Requirements and basic principles of implementing this system are formulated. The strategic guidelines for the quality improvement and the safety increase of domestic poultry are grounded. The economic and social consequences of their implementation are defined.

Key words: food market, quality, safety, poultry products, HACCP, export, import.

INTRODUCTION. In recent years, agriculture in Ukraine has reached a stable positive trend and it is increasing its production more and more. In modern society it is important to achieve a principal new state of domestic agricultural production, which would ensure obtaining high quality, environmentally friendly and healthy food. One of the priorities of the country, along with providing the environmentally acceptable conditions of life, maintaining and sustainable using of natural resources, is to enhance the physical health of the nation. The most significant factor that makes an impact on the human health during the whole life is food. The priority of attention to quality and food safety is caused by indispensability of food and its significant social importance.

Research of the Ukrainian poultry development and competitive eggs and poultry meat market are reflected in the scientific works of famous scientists: V.P. Boroday, V.I. Boyko, R.I. Buryak, I.A. Ionov, S.D. Melnychuk, V.V. Melnyk, O.O. Lukyanenko, N.P. Ponomarenko, M.P. Slyusar. A significant achievement in the development of the problems of quality control and food safety are the scientific papers of native and foreign scientists: B.A. Mel'nyk, S.M.Kvasha, N.H.Kopytets', V.I.Topikha, M.I. Shapoval, O.M.Shpychak, F.O.Yaroshenko, Farrell D.J. Without diminishing the value of works devoted to the study of the problem of eggs and poultry meat market development, it should be noted that the number of issues is still controversial, the content of this issue concerning the appropriate level of quality and safety of poultry products requires more detailed study, especially in the economic assessment of these processes.

The aim of the research is to identify the key problems of domestic poultry industry in the context of world food market globalization; to establish the factors that determine the need of quality provision system improvement and the safety increase of poultry eggs and meat; to formulate requirements and basic principles of implementing such a system; to justify strategic



directions for the quality and the safety improvement of domestic poultry and the economic and social consequences of their implementation.

MATERIALS AND METHODS. Research is based on a scientific work of domestic and foreign scientists and experts on issues of food quality and safety, on the results of an independent survey of poultry meat consumers. The methodology of the investigation took into account the factors of formation and interaction on the basis of analysis and synthesis, analytical prediction of the processes compatible with their elements of market economy, competition, and features in a globalized market poultry products. For goal achieving, the following methods were used: dialectical (the study of economic phenomena and theoretical principles), abstract and logical (theoretical generalizations and conclusions formation).

THE RESULTS OF THE RESEARCH. Ukrainian poultry industry is an important component of agriculture and ensures country food security. Industry has strong production capability, the amount of which in recent years exceeds domestic demand and gives impulse for innovative development to domestic enterprises to expand their participation in the global market. In today's globalized food markets the role of poultry industry with the effective implementation of the existing benefits of available resource potential provides solving food problems both on the domestic and international markets. The development of the integration processes and globalization of world markets led to an increase of a number of countries which import poultry eggs and poultry meat. In this regard, it is necessary to develop strategies of improving the poultry products quality and safety, aimed at developing an effective, ecologically -safe and socially directed development of production that can satisfy the needs of the domestic market and provide an entrance of domestic enterprises into international food markets. Studies have shown that poultry industry has a wide range of process chains on the way to the final consumer (Lukashenko, Stefanova, 2002). Within this process the chance of contamination increases so it makes it necessary to strengthen means of control (Farrell D.J., 2002; Gavrilencov, 2005). Therefore such strategy should provide security at all stages, from fodder production to poultry products consumption. It is based on the legal basis of poultry enterprises activities and achievement of food security of the country.

Consumers' requirements for the quality and safety of products determine the necessity of risks minimization and monitoring the relevant parameters of products (Melnichuk, 2007). It is established that during products purchasing, customers make choices based on such factors as price, appearance, smell and quality, in a way they understand it. We believe that they might make decisions having complete information of the poultry products quality that will satisfy their needs in a full degree. Lack of information of food safety makes consumer's choice more difficult.

Taking into account the fact that products from raw poultry meat contain microorganisms, which may be pathogenic, raw food carries a risk of consumers' poisoning. However, the latter can not determine the presence and level of risk because pathogenic microorganisms can not be detected by eye. Although consumers are able to distinguish poor quality product from a high quality product with such obvious signs as odor or discoloration caused by influence of harmful microorganisms, but they can not know for sure whether this product is safety or not. In case of health problems caused by poor quality food, consumers usually can not associate symptoms with certain food. Thus, the properties of food is not sometimes clear for consumers before purchasing or directly after consumption. The problem of the lack of information also can be applied to wholesalers and retailers, who tend to use the same methods of testing – appearance and smell. These individual small businesses try to avoid the obligation of implementing the relevant requirements referring to situations at which they sell most of their products to relatives, friends, neighbors etc.

The lack of awareness of the disease means that manufacturers and processors of poultry eggs and meat are not interested in additional expenses for controlling products quality and safety. It means that businesses of all levels - from the initial receiving the product to the shopping places - can provide the market with hazardous products without any legal consequences or effects in a demand reduction for their products. The raw product is often mixed at early stages of the marketing chain which makes an additional complications. Considering the fact that consumers have very limited technical or scientific knowledge about the product coming to the market,



brand and reputation of the manufacturer are usually replaced by this information and stimulate the future purchases. Thus, trade names and product reputation are valuable capital for producers.

Recently in Ukraine more poultry eggs and meat are produced under the brand names (Gavrilenkov, 2005; Melnychuk, 2007). In our opinion, nationally recognized brand name in itself is enough motivation for producers to increase food safety.

In recent years, Ukraine increases export of poultry, delivering it into 23 countries, including African and Asian countries, the USA. In 2013 the approval for the products supply to the European Union became the recognition of its quality. We must point out that European legislation is one of the the strictest in this field. Exports of poultry products are allowed only for four companies: «Myronivska ptakhofabryka», «Lehko», «Agromars», «Ptakhofabryka «Snyatynska Nova», which have already implemented European technology.

However, as our analysis has shown, not all manufacturers use food control technologies to guarantee food safety in practice. The considerable part of poultry is branded and produced under conditions that do not provide the minimum information about possible risks of pathogenic organisms growth. It is proved that, the part of poultry enterprises do not use the full scientific and technological achievements for the effective control of production processes, because of the following reasons:

- poultry industry is highly competitive, so there is quite a large number of small and medium-sized enterprises with limited capital and small profits;
- owners of small businesses are not interested in additional capital investments that enhance food safety because the results of these investments remain unnoticed by customers and therefore do not generate income.

Thus, the lack of adequate incentives for quality improvement and increase of product safety in the poultry industry, lack of consumers awareness destabilize the market and require regulation of indicators at the industry level in order to protect public health.

Our research of poultry eggs and meat production allowed to identify the key issues for domestic poultry industry on a globalized food markets. Among them are:

- need to improve the competitiveness of domestic production of poultry products on the domestic and international food markets, which requires the implementation of innovative and highly competitive technologies adapted to the needs of control safety of poultry eggs and meat;
- availability of quality control and safety of the final product, rather than control of each technological stage at big enterprises, lack of constant monitoring of quality and safety at all stages of production in small and medium-sized enterprises;
- poor infrastructure development of the food market, imperfection of promotion channels of the domestic poultry industry to world markets, bad representation of eggs and poultry products produced for own consumption on the market;
- concentration of a significant proportion of eggs and poultry meat in small and medium-sized producers, lack of material and technical base of these companies, which does not allow them to be competitive on the market, limited long-term investment to the development of high quality products production;
- the lack of support of farming enterprises by the government that does not take into account the necessity of improving the technology aiming at enhancing the quality and safety of eggs and poultry together with poor investment capacity of individual businesses and the lack of availability of national financial and credit resources;
- low purchasing ability of the population, which reduces the demand for high quality products.

In our opinion, key factors that determine the needs of improving the quality provision system and increasing the safety of domestic poultry products, leveling of negative objective and specific to such industry factors are:

- the discrepancy of producers economic interests to high quality and appropriate level of security and the consumers' interests with the low solvency of the population;
- lack of opportunities of small and medium-sized enterprises, unlike big producers, to respond quickly to changes in products quality;
- the need to ensure an adequate long-term storage for eggs and poultry meat with seasonal



changes of consumer demand, the lack of the developed of the consolidated position on quality security and safety of the final product because of the producers isolation from each other, supportive and packaging materials.

In Ukraine the considerable work on the adaptation of national requirements in the production of eggs and poultry meat to European ones and harmonization of existing national legal framework with international standards is carried out. It is confirmed by the «System of food safety management. Requirements» which came into force in 2003, domestic quality standard 4166-2003, the adoption of the Law of Ukraine «The food safety and quality» in 2005. In 2007, the identical to the international standard document ISO 22000-2005 «Management System Food Safety. Requirements for the organization of production and distribution» came into force as well as Domestic quality standard ISO22000 «Management systems of food safety. Requirements for any organization in a food chains». We identified the main producers of fodder, poultry eggs and meat, fast food and catering, transport and food storage and those who are involved into the process. Suppliers of equipment, packages and other materials that serve the production and consumption of poultry products according to the principle «from farm to the table» take an indirect part in this progress. In our opinion, the quality of poultry products is formed under the influence of a great number of factors, leaving behind the controversial question of the application of state (national) standards in the domestic market on a voluntary basis, which actually means the cancellation of obligatory certification of poultry products.

Consumer requirements for receiving high-quality and safe products determine the necessity of risks minimization and products safety monitoring. It raises the necessity of different concepts of food safety development, including poultry products. This system is based on scientifically formed approach of ensuring the safe products production by identifying and controlling dangerous factors – «Dangerous factors analysis and critical management points» – HACCP. We believe that the concept of HACCP has a structured approach to the control of identified dangerous factors, whereas traditional methods involve inspection or quality control of the final product. However, on a global poultry market there is a need to ensure equivalent requirements for its safety level not only by individual countries, but also on the global level. Hence, the expansion of international trade by domestic enterprises requires harmonization of sanitary measures, security of the fodder and ready products. According to the results of our study we identified the main benefits of implementing HACCP on domestic enterprises (Picture 1).

Basic principles and recommendations for food safety which were adopted by the CODEX ALIMENTARIUS Commission, were recognized by the WTO Agreement «On Sanitary and Phytosanitary Measures» and are the basis for the harmonization of sanitary measures. The current Law of Ukraine «On the Safety and Quality of Food» establishes the procedure of quality ensure providing of poultry products safety which are produced, distributed, imported and exported (Law of Ukraine on safety products). Thus food manufacturers are working out and implementing their HACCP systems in accordance with the CODEX AALIMENTARIUS Commission «Recommended International Code of Rules, General Principles of Food Hygiene.»

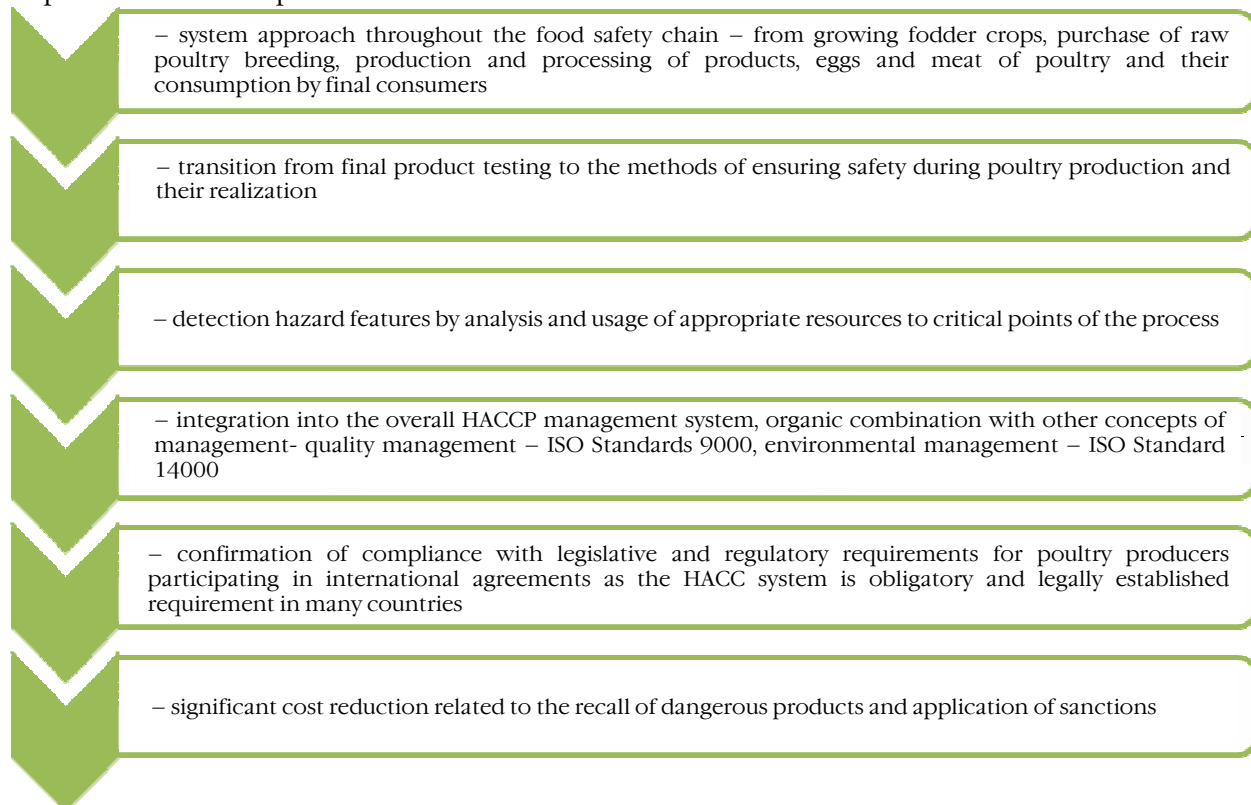
In our opinion, the effectiveness of the adopted laws and regulations of poultry products control system is determined by the increase of the level of consumers health protection. Especially measures to ensure the safety and quality of products coming into international trade are needed to be taken, as well as to provide an opportunity to test import food according to national standards. We are convinced that the main direction of domestic poultry industry is a steady supply of high-quality, safe, affordable products, the creation of economic conditions for the investment process, active participation in global food markets.

We believe that the strategic objective of the quality improvement and safety increase of poultry products should be the creation of conditions for the effective implementation of the system which will foresee the unity of economic, social and environmental interests of producers and consumers.

The aim of this strategy is the provision of the competitiveness of domestic poultry products in domestic and global markets, the stability of the national market of eggs and poultry and food security; intensification of the position to harmonize national and international standards in order to supply quality products to the European market; formation of the policy of import of



poultry products and the development of export potential of the industry; stable motivation to improve the social aspects of life.



Picture 1. The main advantages of implementing HACCP in the production of poultry in Ukraine

Practice shows that at the present stage it is necessary to provide the change of stereotypes of interaction of business, government and consumers in the field of poultry industry development. Realized studies have formulated the basic principles of the introduction of quality and safety improvement of the national poultry products, namely:

- priority of quality and safety in production of eggs and poultry and government policy of industry development;
- adherence to coordination of the needs of the domestic market for high quality products and opportunities to promote them to the world markets;
- provision of the export potential of the industry development in terms of provision independence of the state;
- incentives to improve the quality and safety of eggs and poultry meat providing the state support from direct funding to the development of public-private partnerships and improvement of the economic mechanism of its functioning.

In our opinion, the basic requirements for such a system are:

- balancing the criteria of economic, social and environmental development of the industry, in compliance with partnerships between the state, farming enterprise, consumer products and responsibility at all levels of products promotion - from fodder production to the final consumer;
- creating the incentives for firms in order to accelerate the introduction of HACCP system into production, proving business entities with the benefits which can ensure relevant quality and products safety to enhance their export potential;
- formation of results from the functioning of the eggs and poultry production taking into account certification of the products;
- providing special events on informing the consumers and increasing their awareness which will be resulted in the price which consumers are ready to pay for safe poultry products.

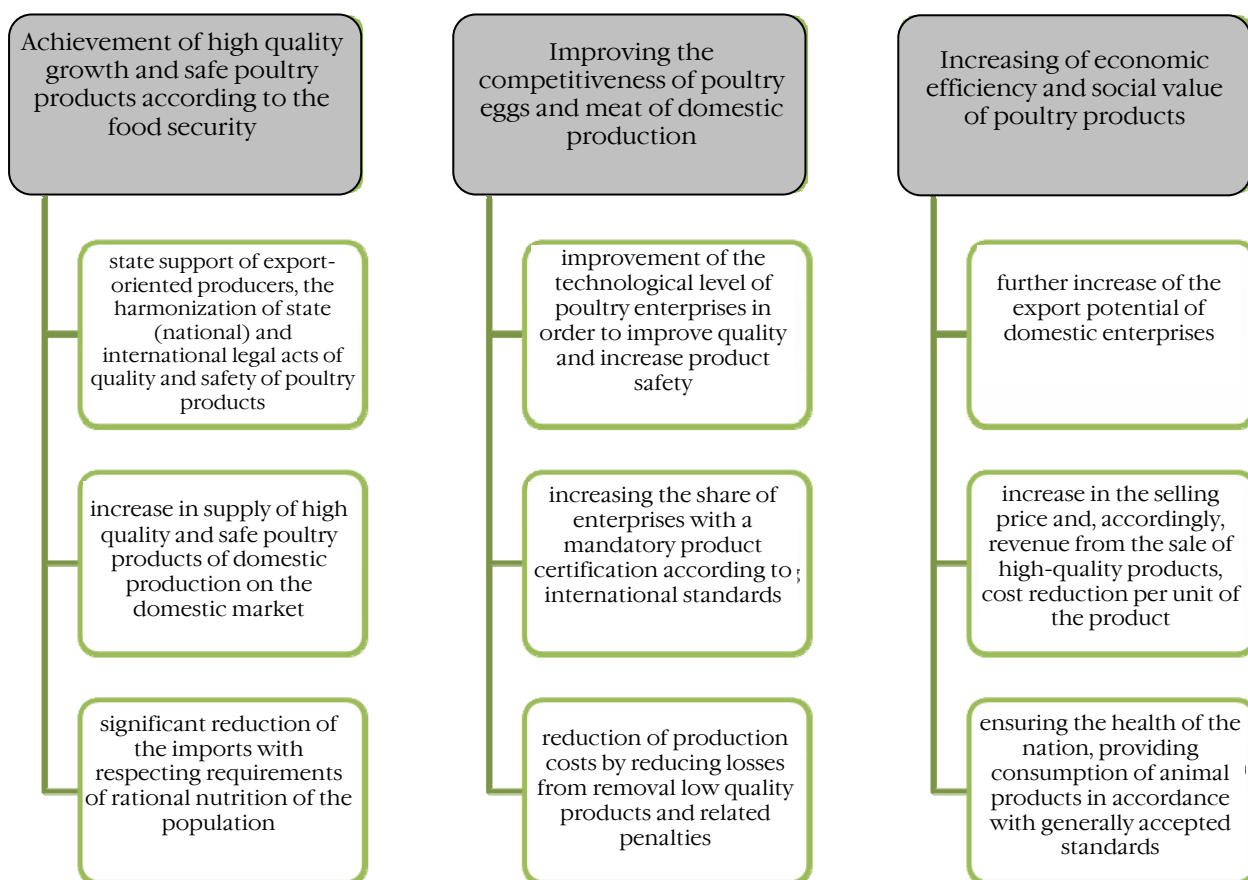
One of the effective criteria for quality control and safety products improving for domestic enterprises is to increase its competitiveness and prospects for international indicators.



The research allowed to prove strategic directions for quality improving and safety increasing of poultry products, such as:

- improving the standardization and certification of poultry products in accordance with international requirements;
- formation of independent systems of laboratories for determining the quality of poultry eggs and meat and their products under the guidance and methodological support provided by Ukrainian Laboratory of Food Quality and Safety;
- increasing exports of poultry eggs and meat, on the condition of provision the domestic market with products, monitoring and development forecasting of global poultry markets of eggs and meat aiming at immediate reaction to market risks, preventing food security threats;
- state support for the technological upgrading of the industry in order to promote the use of environmental technologies of poultry production, to stimulate the modernization of production for compliance with the relevant conditions of poultry growing and receiving high quality products;
- preferential long-term loans to investment projects, updating and implementing modern technology to produce high quality poultry eggs and meat, state support of the competitiveness of small businesses and stimulation of the development of their cooperatives;
- using the mechanisms of market regulation parameters to eliminate conflicts of interest in the commodity chain “farm-to-table”, using trade and financial interventions to decrease the price fluctuations on the food market;
- forming active mechanisms of financial providing of the production needs for poultry industry, introducing the insurance system of risks, identifying the main directions of state and private partnership of the industry development.

Scientific research allowed to determine the economic and social consequences of quality improvement and safety increase poultry products (Pic. 2)



Picture 2. Economic and social consequences of quality and safety improvement implementation of poultry products



CONCLUSIONS. Taking into account the written above, it can be proved that the problems of food safety, including poultry products, is one of the key prerequisites for ensuring proper quality of life and health. In our opinion, it needs developing a strategy that involves a combination of hazard and risks identification with corresponding control measures. We consider that structural approach to effective cooperation of manufacturers, regulatory authorities and consumers of poultry eggs and meat will provide the increasing role of effective regulation of quality provision and food safety. In our opinion, in the context of Ukraine's integration into the global food market the shaping of government policy should be based on international experience of ensuring the quality and safety of poultry products. In addition, a comprehensive approach to solving the problems of quality poultry products will provide an opportunity to identify the impact of individual stages on the final result, establish their relationships, clarify the prospects of safe competitive products and the economic efficiency of this process. Prospects for further research is to develop proposals on improving management arrangements of poultry eggs and meat safety, quality and their correspondence to European and international standards as well as domestic social and economic characteristics of poultry market development.

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Кирилюк О.Ф., канд. екон. наук, доцент кафедри бухгалтерського обліку, аналізу та аудиту Національного університету біоресурсів і природокористування України

Стратегічні напрями поліпшення якості та підвищення безпечності продукції птахівництва за умов глобалізації продовольчих ринків. У статті визначено ключові проблеми розвитку вітчизняної птахівничої галузі за умов глобалізації продовольчих ринків, встановлено чинники, які обумовлюють необхідність поліпшення системи забезпечення якості та підвищення безпечності яєць і мяса птиці, сформульовано вимоги та основні принципи впровадження такої системи. Обґрунтовано стратегічні напрями поліпшення якості та підвищення безпечності продукції вітчизняного птахівництва, визначено економічні та соціальні наслідки їх реалізації.

Ключові слова: продовольчий ринок, якість, безпечність, продукція птахівництва, НАССР, експорт, імпорт.

Кирилюк О.Ф., кандидат экономических наук, доцент кафедры бухгалтерского учета, анализа и аудита Национального университета биоресурсов и природопользования Украины

Стратегические направления улучшения качества и повышения безопасности продукции птицеводства в условиях глобализации продовольственных рынков. В статье определены ключевые проблемы развития отечественной птицеводческой отрасли в условиях глобализации продовольственных рынков, установлены факторы, которые обуславливают необходимость улучшения системы обеспечения качества и повышения безопасности яиц и мяса птицы, сформулированы требования и основные принципы внедрения такой системы. Обоснована стратегические направления улучшения качества и повышения безопасности продукции отечественного птицеводства, определены экономические и социальные последствия их реализации.

Ключевые слова: продовольственный рынок, качество, безопасность, продукция птицеводства, НАССР, экспорт, импорт.