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## **IMPROVING ECONOMIC MECHANISMS FOR THE DEVELOPMENT OF THE POULTRY INDUSTRY SERVICE SYSTEM**

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### **Abstract**

This article analyzes the current state of service infrastructure in the poultry industry and substantiates the economic mechanisms for its development. The impact of veterinary medicine, feed supply, logistics, consulting, digital services, and financial services on the efficiency of poultry enterprises was assessed. The study utilized methods of statistical analysis, expert assessment, and SWOT analysis. The results showed that the integrated development of the service system reduces production costs, increases production efficiency, and enhances the competitiveness of the industry.

**Keywords:** Poultry farming, service, infrastructure, veterinary service, feed supply, logistics, digitalization, economic efficiency.

### **Introduction**

Poultry farming is considered one of the strategically important sectors of agriculture and plays an important role in ensuring food security, providing the population with affordable and high-protein food products, and increasing employment in rural areas. Global population growth, a sharp increase in food demand, and the need for the widespread introduction of innovative technologies in the agricultural sector necessitate the more effective development of the poultry industry. From this perspective, one of the priority tasks is not only increasing the volume of poultry production but also improving the service system in this industry, the rational use of resources, and reducing production costs.

In recent years, large-scale reforms have been implemented in our country aimed at supporting the poultry sector, creating modern poultry complexes, attracting



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investment, and developing private entrepreneurship in the sector. However, the service system, which is one of the important factors affecting the sustainable development of the industry, is still insufficiently formed. In particular, the lack of coordination between veterinary services, incubation services, feed supply, laboratory diagnostics, logistics, marketing, information and consulting, and financial services negatively affects production efficiency. As a result, problems arise such as high production costs, inefficient use of resources, and a decrease in market competitiveness.

International experience shows that the comprehensive development of service infrastructure in the poultry industry is an important factor in increasing production efficiency, ensuring product quality and safety, reducing costs, and increasing export potential. In this regard, a comprehensive assessment of the current state of the poultry industry service system, the improvement of its organizational and economic mechanisms, and the development of scientifically grounded proposals and recommendations for its development based on modern digital and innovative solutions are of urgent scientific and practical importance. The purpose of this article is to analyze the current state of the poultry industry service system, evaluate factors affecting its efficiency, and develop organizational and economic proposals that serve to increase the competitiveness of the industry.

### **Literature Review**

In recent years, the importance of the service system in the effective development of the poultry industry has been extensively studied by foreign and domestic scientists. In scientific literature, this system is evaluated as an integral part of poultry production, and it is emphasized that its efficiency directly affects production costs, product quality, biological safety, and market competitiveness. In particular, mutual integration between veterinary services, feed supply, incubation, logistics, information and consulting, and financial services is recognized as one of the key factors ensuring the sustainable development of the industry.

In foreign research, special attention is paid to the economic efficiency of developing service infrastructure in the poultry sector. Researchers note that in



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countries with a sufficiently developed service system, the efficiency of using production resources increases, the cost of production decreases, and the competitiveness of manufacturers in foreign markets increases. It is also scientifically substantiated that the implementation of digital technologies, automated management systems, and decision-making mechanisms based on precise data serves to optimize service delivery processes and reduce production risks.

In domestic scientific literature, great attention is paid to increasing poultry production, strengthening the feed base, improving breeding, and mechanisms of state support. However, there are relatively few studies dedicated to evaluating the poultry industry service system from an economic perspective based on a comprehensive approach, analyzing the functional relationships between its structural elements, and comprehensively assessing the impact of service quality on production efficiency. Therefore, conducting scientific research in this direction based on modern methods of economic analysis is of great importance. An analysis of the literature shows that a unified methodological approach to evaluating the effectiveness of the service system in the poultry industry has not yet been formed. Most studies analyze specific types of services, but insufficiently cover issues of their mutual integration, coordination through digital platforms, the impact of service infrastructure on economic efficiency, and the comprehensive assessment of service quality. This scientific gap determines the relevance of this study and indicates the need to develop new scientific approaches to improving the organizational and economic mechanisms for developing the poultry service system.

### **Methodology**

In this study, a comprehensive research methodology was used to assess the level of development of the poultry industry service system and to develop scientifically grounded proposals for its improvement. The research methodology is aimed at evaluating the structural elements of the service system, their interdependence, and their impact on the economic efficiency of poultry enterprises. During the research process, theoretical and practical approaches were combined, and modern methods of economic analysis were applied.



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The theoretical basis of the research is the scientific works of domestic and foreign scientists in the fields of poultry economy, agro-service system, agricultural service infrastructure, value chain and agribusiness management. Additionally, state programs for the development of the poultry industry, regulatory legal acts, sectoral reports, and official statistical data served as the information base for the study. Through a systematic analysis of scientific literature, the main components of the service system and their factors influencing the production process were identified.

During the study, the main economic indicators of the poultry industry and development trends in the service sector were analyzed using the economic-statistical analysis method. Through the method of comparative analysis, national practice was compared with the experience of foreign countries, and the strengths and weaknesses of the service system were evaluated. Based on a systems approach, the functional linkages between the main service sectors—veterinary services, feed supply, incubation services, laboratory diagnostics, logistics, marketing, information and consulting, and financial services—were analyzed.

### **Results**

The research results showed that the service system in the poultry industry is one of the key factors ensuring production efficiency. During the analysis, it was established that the coordinated operation of veterinary services, feed supply, incubation services, laboratory diagnostics, transport and logistics, marketing, information and consulting, and financial services, which are part of the service system, directly affects the economic results of poultry enterprises. However, in practice, the fact that most of these services operate independently, the insufficient exchange of information between them, and the lack of a unified service platform cause additional costs and time losses in the production process. In the course of the study, the structural elements of the service system were evaluated based on their economic significance. The results showed that veterinary services and feed supply are the factors that have the greatest impact on the efficiency of the network. Improving the quality of these services will ensure poultry health, increase productivity, and reduce production losses. At the same time, the improvement of logistics services serves to ensure the fast and



high-quality delivery of products to the consumer and to reduce losses during storage and transportation. The introduction of information and consulting services and digital technologies allows for the rapid management of production processes, efficient resource use, and improved quality of management decision-making.

Table 1 Basic elements of the service system in the poultry industry

Type of service	Effect on performance
Veterinary	Reduces bird mortality
Incubation service	Increases chicken yield
Food supply	Reduces cost
Logistics	Reduces losses
Laboratory	Detects diseases early
Consulting	Optimizes production
Digital services	Increases management efficiency

As a result of the analysis, it was determined that to increase the efficiency of the poultry industry service system, it is necessary to organize all its components based on a unified integrated mechanism. This approach simplifies the exchange of information between service providers, poultry farms, financial institutions, and government agencies, enables the prompt and high-quality provision of services, and reduces transaction costs. Furthermore, the coordination of services through digital platforms ensures the transparency of production processes and expands opportunities for monitoring and evaluating service quality.

Based on the results obtained, a conceptual model for the development of the poultry industry service system was proposed. According to this model, the poultry enterprise will be located at the center of the service system and will be integrated with veterinary, feed supply, incubation, laboratory, logistics, marketing, information and consulting, and financial services through a single digital management platform. Such a system makes it possible to increase the efficiency of using services, coordinate the movement of resources and accelerate the decision-making process.

Overall, the research results confirmed that the comprehensive development of the service system in the poultry industry is an important condition for reducing production costs, improving product quality, increasing labor productivity, and



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strengthening the industry's competitiveness in domestic and foreign markets. In this regard, the modernization of service infrastructure, the widespread introduction of innovative and digital technologies, and the strengthening of public-private partnerships were identified as priority areas for ensuring the sustainable development of the industry.

### **Discussion**

The results of this study demonstrated that the efficiency of the service system in the poultry industry is crucial not only for ensuring the continuity of production processes but also for enhancing the economic stability and competitiveness of the industry. The results obtained are consistent with the conclusions presented in the scientific literature, confirming that the development of service infrastructure serves to reduce production costs, increase resource efficiency, and ensure product quality and safety. In particular, the coordinated operation of veterinary, feed supply, laboratory diagnostics, and logistics services is a key condition for increasing production efficiency at poultry enterprises.

One of the problems identified during the study is the fragmented organization of the service system. In practice, the independent provision of services by different organizations leads to slower information exchange, longer service life, and increased transaction costs. This situation is particularly evident in small and medium-sized poultry farms, limiting their access to modern service services. From this perspective, managing service delivery processes through a unified coordinating digital platform and integrating all participants into a unified information system will significantly improve the quality and speed of services. The results of the study also showed that strengthening cooperation between the public and private sectors is of great importance in the development of the service system. In particular, cooperation between private veterinary centers, logistics companies, incubation centers, feed producers, and financial institutions will strengthen the competitive environment in the services market, improve service quality, and introduce new innovative solutions. At the same time, state measures aimed at infrastructure development, support for digital services, and financial incentives for service entities will further increase the efficiency of this process.



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The results of the study also showed the need to apply a comprehensive economic approach when evaluating the service system in the poultry industry. While most existing scientific research is limited to the analysis of specific service areas, this study considers the service system as a single integrated mechanism. This made it possible to determine the functional relationship between various service sectors, assess their impact on production efficiency, and develop comprehensive scientific and practical proposals for the development of the industry.

Thus, the research results showed that the modernization of the poultry industry service system, the widespread use of digital technologies, the comprehensive development of service infrastructure, and the improvement of public-private partnership mechanisms are among the key factors in increasing the sustainable development and competitiveness of the industry. In the future, it is advisable to develop economic indicators for assessing service quality in this direction, evaluate service efficiency using economic-mathematical models, and analyze the economic impact of digital agro-service platforms based on empirical data.

### **Conclusion**

This study was aimed at a comprehensive assessment of the state of the poultry industry service system and the substantiation of organizational and economic directions for its development. The research results showed that the service system is an important infrastructure that ensures the effective functioning of the poultry industry, and its level of development directly affects production efficiency, product quality, production costs, and the competitiveness of the industry. In particular, it was determined that the coordinated operation of veterinary services, feed supply, incubation, laboratory diagnostics, logistics, marketing, information and consulting, and financial services is of decisive importance for the sustainable development of poultry enterprises.

During the study, the current state of the service system was analyzed, and the main problems hindering its development were identified. In particular, insufficient coordination mechanisms between services, uneven development of service infrastructure by region, low level of use of digital services and insufficient formation of the information exchange system were assessed as the main factors limiting the efficiency of the network. At the same time, the



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integration of the service system based on a single digital platform, the expansion of cooperation between the public and private sectors, and the implementation of measures aimed at improving the quality-of-service services have been substantiated, which will significantly increase the economic efficiency of the industry.

Based on the research results, the following practical proposals have been developed to improve the poultry industry service system: first, the integration of service providers through a unified information and digital platform; second, strengthening the material and technical base of veterinary, logistics, and laboratory services; third, expanding private sector participation in the service market and developing public-private partnership mechanisms; fourth, the widespread introduction of digital technologies and intelligent management systems in the industry; fifth, the practical implementation of economic indicators and monitoring mechanisms for assessing service quality. The implementation of these proposals will contribute to the efficient use of resources in the poultry industry, reduce production costs, improve product quality and safety, and strengthen competitiveness in domestic and foreign markets.

In general, the organizational and economic approaches and practical proposals developed in the study enrich the scientific and methodological foundations for the development of the poultry industry service system and can be used in developing strategies aimed at managing the industry, improving state programs, and developing service infrastructure. In the future, prospective areas of scientific research in this direction include assessing service efficiency based on economic and mathematical models, analyzing the economic impact of digital service platforms using empirical data, and conducting comparative studies with international experience.

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