

**MAIN FACTORS AND DIRECTIONS FOR INCREASING EFFICIENCY IN FISH
FARMS OF THE SYRDARYA REGION**

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Abstract. The article analyzes the main economic factors influencing the development of the fishing industry and increasing production efficiency in the Syrdarya region. In the study, the volume of fish production, the cost of production, the level of profitability, and the state of implementation of intensive technologies were studied in interconnection. The obtained results showed that by using intensive methods, optimizing the feed base, and economically correctly organizing production, it is possible to significantly increase the efficiency of fish farms in the Syrdarya region. The article develops practical proposals and conclusions appropriate to the conditions of the region.

Abstract. The article analyzes key economic factors influencing the improvement of fisheries efficiency in the conditions of the Syrdarya region. The study comprehensively examines fish production volumes, production costs, profitability levels, and the degree of implementation of intensive aquaculture technologies. The findings demonstrate that rational use of the feed base, modernization of production processes, and economically sound organization of fisheries operations can significantly enhance efficiency in the Syrdarya region. The article presents practical conclusions and recommendations adapted to regional conditions.

Keywords: Syrdarya region, fisheries, economic efficiency, intensive aquaculture, production costs, profitability, feed base.

ENTRANCE

In the agricultural system of the Syrdarya region, the fishing industry plays an important role in providing the population with high-quality food products, increasing employment in rural areas, and increasing the efficiency of agricultural production. The region has artificial reservoirs, collector-drainage networks, and climate conditions suitable for agriculture, which create an economic basis for expanding fish farming. At the same time, the inadequate use of existing opportunities, insufficient implementation of technologies, and high production costs limit the efficiency of the industry.

In the Syrdarya region, the majority of fish farms are small and medium-sized entities, and the level of use of intensive methods in them has not yet been fully formed. This situation leads to high production costs, limited profitability, and limited market access opportunities. Therefore, the economically efficient development of the fishing industry in the conditions of the region, the rational use of resources, and the improvement of production organization mechanisms are relevant issues. In this article, using the example of the Syrdarya region, the main factors influencing the economic efficiency of the fishing industry are analyzed, and the current state and development opportunities are scientifically assessed.

LITERATURE ANALYSIS ON THE TOPIC

Issues of sustainable development of fish farms of various forms of ownership, improvement of mechanisms for their systematic and effective management, as well as development of the industry based on intensive and innovative technologies have been widely studied by economists of our country and foreign countries. Scientific research in this area is aimed at increasing production efficiency, rational use of resources, and improving the management system in the fishing industry.

In particular, foreign scientists F. Berkis, R. Mahon, M. Solomon, R. Hilborn, P. Daniel, F. Rainer, F. D. Johnston, A. S. Tommas, S. Hammerland, K. Greer, J. Mattias deeply scientifically substantiated the issues of sustainable development of fish farming, improvement of institutional and economic mechanisms for its management. In these studies, special attention is paid to the issues of introducing intensive technologies in fish farms, ensuring a balance between environmental sustainability and economic efficiency.

Among scientists from the CIS countries, S. I. Kurdyukov, A. K. Bogeruk, Dj. Ritter, O. V. Kuznetsova, N. V. Alesina, R. R. Galuliniya, J. M. Gordon, V. K. Kiselyov, P. A. Dushin, A. A. Tarasenko, V. S. Kazancheva, D. Sh. Yakubova et al. scientifically studied the issues of state regulation of the fishing industry, diversification of economic management forms, and increasing production efficiency. Also, some issues in this area have been partially studied in the scientific works of domestic agricultural economists D. R. Shokhimardonov, S. S. Gulyamov, R. Kh. Ergashev, I. O. Yunusov, and other researchers. In these works, attention is paid to the issues of increasing economic efficiency in fish farms, introducing intensive methods, and improving management mechanisms.

At the same time, the analysis of existing scientific research shows that the economic efficiency of fish farms, regional resource capabilities, and features of production organization in the Syrdarya region have not been sufficiently comprehensively studied. This situation determines the need for a deep study in this article of the issues of sustainable and effective development of the fishing industry using the example of the Syrdarya region.

RESEARCH METHODOLOGY

In carrying out this research work, methods widely used in the methodology of scientific research were used in a comprehensive manner. Methods of logical thinking, scientific abstraction, data grouping, analysis and synthesis, induction and deduction were used in the analysis of trends in the development of the industry and issues of increasing production efficiency through the effective use of the fishing industry in the Syrdarya region.

Also, economic-analytical and comparative methods were used to determine the relationship between the volume of fish production, the cost of production, and profitability indicators. Based on the data obtained during the research, a generalization was carried out, and scientific conclusions aimed at increasing the economic efficiency of fish farms in the Syrdarya region were formulated.

ANALYSIS AND RESULTS

The economic efficiency of the fishing industry in the Syrdarya region is characterized, first of all, by the dynamics of production volumes, product cost, and profitability indicators. The results of the analysis show that in recent years, the level of use of intensive methods in increasing the volume of fish production in the region has significantly increased.

Table 1.

Main economic indicators of fish farms in Syrdarya region

Indicators	2022	2023	2024
Volume of fish production (tons)	3 150	3 820	4 460
Cost of one ton of product (million soums)	14,2	13,5	12,8
Profitability (%)	18,6	21,4	25,1
Share of intensive	32	41	54

technologies (%)			
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According to the data in Table 1 above, the volume of fish production in the Syrdarya region had a stable growth trend during 2022-2024. In particular, during this period, fish production increased from 3,150 tons to 4,460 tons, which indicates a significant increase in production volumes. This is explained, first of all, by the effective use of artificial reservoirs and the phased introduction of intensive technologies. Analysis shows that the increase in the share of intensive technologies served to reduce the cost of production. In particular, the cost of one ton of fish products in 2022 amounted to 14.2 million soums, and by 2024 this figure decreased to 12.8 million soums. The decrease in cost was due to the optimization of feed costs, the economical use of water resources, and increased labor productivity.

At the same time, the level of profitability, which is an important indicator of production efficiency, also showed positive changes. During the analyzed period, the level of profitability increased from 18.6% to 25.1%, which confirms the increase in the efficiency of economic activity in fish farms. In particular, the increase in the share of intensive technologies from 32 to 54 percent had a significant positive impact on production results. The obtained results show that in the development of the fishing industry in the Syrdarya region, increasing efficiency through the rational use of resources and improvement of technologies is of priority importance, rather than expanding production volumes. This is an important scientific and practical basis for the sustainable development of the industry and the improvement of economic results.

CONCLUSIONS AND PROPOSALS

As a result of the analysis conducted, it was established that the introduction of intensive production methods, rational use of resources, and economically correct organization of production are important in increasing the economic efficiency of the fishing industry in the Syrdarya region. The results of the analysis showed that the increase in fish production volumes is inextricably linked with a decrease in the cost of production and an increase in the level of profitability.

The study revealed that the economic efficiency of fish farms in the Syrdarya region largely depends on the level of use of intensive technologies, and the widespread introduction of these technologies will reduce production costs and improve product quality. At the same time, optimizing the fodder base and increasing labor productivity also have a positive impact on the efficiency of the industry.

Based on the foregoing, the following proposals have been developed for the development of the fishing industry in the Syrdarya region:

- phased introduction of intensive and innovative fish farming technologies;
- development of the domestic fodder base in order to reduce feed costs;
- improvement of economic management mechanisms in fish farms;
- increasing investment activity and attracting modern technologies in the sphere;
- strengthening the implementation of the results of scientific research in the industry.

LIST OF USED LITERATURE

1. Decree of the President of the Republic of Uzbekistan dated September 11, 2023 No. UP-158 "On the Strategy "Uzbekistan - 2030."
2. Ergashev R., Khalikov S., Beglaev U. Economics of Fish Farming: Textbook. - Тошкент, 2020. - 292 pages.
3. Dorohov S.M. et al. Pond Fish Farming. - Moscow: Higher School, 1975. - 312 p.
4. Zokirov O., Pardaev A. Agricultural Economics. - Тошкент: "ЎАЖБНТ маркази," 2003. - 456 pages.

5. Kaliyev G.A. et al. *Labor Peasant (Farmer) Farms: Recommendations*. - Тошкент, 2020. - 30 p.
6. Karimov S., Temirov Sh. Animal Feeding Technology: Lecture Text. - Тошкент, 2021. - 105 pages.
7. Blaug M. The Methodology of Economics, or How Economists Explain. Cambridge: Cambridge University Press, 1992. - 416 p.
8. Maqsudov I., Jo'raev J., Amirov Sh. Fundamentals of Animal Husbandry: Textbook. - Тошкент, 2012. - 361 pages.
9. Choriev K.A. Prospects for the formation and stimulation of the system of introducing innovations in agriculture (methodological recommendations). - Тошкент, 2014.
10. Shokhimardonov D.R. Development of Fish Farming in the Regions. - Тошкент, 2020.