

UDC: 631:639.005

PROSPECTS FOR THE DEVELOPMENT OF FISH PRODUCTION

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Abstract: The article presents research and data on the development parameters of the national economic situation of the country, the creation of a stable economic system and the current state of fisheries and the forecast parameters until 2025 for its further development.

Keywords: resource, fisheries, farm, economy, innovation, system, model, feed, network, development.

INTRODUCTION. In many countries around the world, one of the areas that solves the problem of food security is the fishing industry. Increasing the volume of production of quality and nutritious consumer products in accordance with the needs of the growing population is one of the most pressing issues for many countries today. According to the Food and Agriculture Organization (FAO) [1], in 2017, a total of 174.0 mln. tons of fishing and aquaculture products were produced. Of which, 152.9 mln. tons of fish are consumed as food, and the world population averages 20.3 kg per capita per year.

It has been found that in the context of global climate change, fisheries and aquaculture can make a significant contribution to economic growth in the production of safe food products. According to the FAO, "... by 2050 the world's population will reach about 9.5 billion." It was also noted that "there is a shortage of safe consumer goods" [2].

In the Republic of Uzbekistan, a wide range of work is carried out on the systematic organization of organizational and technological processes of fish production, repeated reproduction of fish fries and improvement of the feed base, rational use of natural and artificial reservoirs, storage and processing of fish products. According to the analysis of the dynamics of fish farming, if in 2000 9870 tons of fish were grown, in 2018 this figure was 90984.3 tons, and compared to 2000 we can see that fish production increased by 9.2 times. Radical reform of the industry through the widespread introduction of intensive fish farming technologies, increasing production efficiency [3] has been identified as a priority. Therefore, today the study and analysis of scientific and practical issues of development and efficiency of the fishing industry is very relevant.

Decree of the President of the Republic of Uzbekistan dated February 7, 2017 "On the Strategy for further development of the Republic of Uzbekistan" (No. PD-4947), Resolutions of the President of the Republic of Uzbekistan dated May 1, 2017 "On measures to improve the management system of the fishing industry" (No. PR-2939) and dated November 6, 2018 "On additional measures for further development of the fishing industry" (No. PR-4005) and other

regulations related to this activity were accepted for further development of this industry. Today, the development of fisheries is primarily influenced by the economic policy of the state in the agricultural sector. Due to this, fisheries have gained their place and prestige as an organizational and legal form of entrepreneurship in the early years of independence. Based on the economic reforms of the state, the legal status of fisheries was determined, and their activities were strengthened by law. Factors such as state support for the development of economic activities, direct participation in production relations, improvement of resource supply and allocation of additional land had a positive impact on the further growth of fishery potential [4].

LITERATURE REVIEW. The researches on the production of fish products is being conducted by many well-known and famous economists.

In the works of Campbell McConnell and Stanley Brue [5] emphasized that the state is the main reformer through the following tasks:

1. The state provides a legal framework and a social environment that ensures the effectiveness of the functions of any system;
2. The state carries out a policy against monopoly (antimonopoly) and protects competition;
3. The state redistributes income and wealth (in this way the state budget is formed);
4. The state shall be responsible for the distribution of resources in order to change the composition of the national product and shall make corrections when necessary;
5. The state focuses more on stabilizing the economy.

On the theoretical and practical aspects of the development of the fishing industry, the economist R.Kurbanov noted that “the income of fisheries is obtained, first of all, by providing the population with fish products” [6]. So, we are talking about the satisfaction of mutual interests. Therefore, in the future, as human needs increase, they will never decrease, and interests will clash. The economist I.Okumus states that “Only their income is affected by factors of production, such as the number of people eligible for labor, the initial capital, land and water area, and entrepreneurial ability” [7]. In recent years, even an information resource has been added to this type of factor, for the production of a product, as A.V.Patel points out, “... first of all, it is possible to ensure the purchase of products by identifying demand and processing information” [8].

According to the prediction scale, the forecast is divided into macroeconomic and microeconomic forecasts. There are two different approaches to forecasting, these can be exploratory and normative. Various options and methods of forecasting the volume of cultivation of their products can be used in the scientific literature. In her research, O.V.Kuznetsova [9] noted that there are 130 different methods of determining the future, according to which they can be conditionally divided into 3 different important groups in forecasting. They explain that it consists of an extrapolation method, an expert evaluation method of forecasting, and modeling methods.

In this regard, the development of fisheries requires the study of ways to develop and increase the efficiency of the fishing industry, given the existing conditions in the regions and the insufficient demand of the population for fish products.

RESEARCH METHODOLOGY. In the scientific and practical research conducted by our scientists on the strategies of economic development of the fisheries sector of developed

countries, the main indicators of the economy of fisheries and fish production, were studied in the process of making conclusions and recommendations for further development of the fishery economy, crisis management and widespread use of advanced technologies in fisheries. In this case, the methods and results of scientific and applied research aimed at describing the specifics of the fishing industry were used.

ANALYSIS AND RESULTS. Considering the possibility of expanding the land and water areas at the disposal of fisheries, their future development can be predicted in a sense. But on the one hand, given the limited land and water areas, it is possible to develop fisheries and increase their income by changing the type of production or specialization in fisheries. Not only is it important to coordinate all areas in the development of fisheries, but the introduction of intensive technologies will allow the development of farms. Establishing and controlling the related part of each intensive and innovative process contributes to the sustainable development of fisheries.

In our research, we have developed a forecast for the increase of fishing in natural and artificial reservoirs and the expansion of artificial reservoirs for 2020-2025.

The specific features of the location of the fishing industry are based on the social division of labor, geographical (territorial) division, a thorough study of each form of use of available resources. In general, the fishing industry shows the distribution of production by regions on the basis of certain principles and under the influence of a number of factors, natural, social, demographic, political conditions. We have developed an econometric model for increasing the volume of fish farming in natural and artificial reservoirs. Factors influencing the outcome factor were identified as follows [10].

To make the prediction, we first perform a multivariate regression analysis.

$$y = \alpha_0 + \sum_{i=1}^n a_i x_i \quad (1)$$

here, y - outcome indicator; x_1, x_2, \dots, x_n - factors affecting outcome indicator,

a_0, a_1, \dots, a_n - unknown parameters.

In order to determine the relationship in a given linear model $y=f(x_1, x_2, \dots, x_n)$, it is necessary to determine the unknown parameters of a_0, a_1, \dots, a_n , for which it is advisable to use the least squares method. Using this method, it is possible to determine the unknown parameters by constructing the following system of normal equations and solving this system of equations:

$$\begin{cases} na_0 + a_1 \sum x_1 + a_2 \sum x_2 + \dots + a_n \sum x_n = \sum y \\ a_0 \sum x_1 + a_1 \sum x_1^2 + a_2 \sum x_1 x_2 + \dots + a_n \sum x_n x_1 = \sum y x_1 \\ \dots \\ a_0 \sum x_n + a_1 \sum x_1 x_n + a_2 \sum x_2 x_n + \dots + a_n \sum x_n^2 = \sum y x_n \end{cases} \quad (2)$$

Once the number of unknown parameters exceeds 2 units, it is advisable to implement it using existing computer programs.

According to the results of the research, forecasting the volume of fish farming in natural and artificial water bodies requires taking into account the specific characteristics and indicators of the industry. In our opinion, in determining the dependence of fish farming volume on

production factors, we used a multi-factor modeling method. By finding a solution to these problems in the research process, it was found that several factors affecting the size of fish farming are interrelated. [11].

In this case, the volume of fish farming in natural and artificial reservoirs is considered as a result factor, and the following important factors affecting production, were taken into account such as the expansion of artificial reservoirs (hectares), increasing the size of fish fry, organization of fishing in water basins, increasing the production of larvae in hatcheries, increasing the capacity of fish processing organizations (Table 1):

Y- Fish farming in natural and artificial reservoirs;

X_1 - Expansion of artificial reservoirs (hectares);

X_2 - Increase the production of fish fry (million units);

X_3 - Organization of fishing in water basins (million units);

X_4 - Increasing the production of larvae in hatcheries (million units);

X_5 - Increase the capacity of fish product processing organizations (tons);

We perform a multivariate regression analysis using the following data on these factors.

Table 1.

Values of factors influencing the regression analysis of fish production volume

| Years | Fish farming in natural and artificial reservoirs (tons) | Expansion of artificial reservoirs (hectares) | Increase the production of fish fry (million units) | Organization of fishing in water basins (million units) | Increasing the production of larvae in hatcheries (million units) | Increase the capacity of fish product processing organizations (tons) |
|-------|--|---|---|---|---|---|
| | Y | X_1 | X_2 | X_3 | X_4 | X_5 |
| 2009 | 22811 | 8142 | 70,5 | 73,8 | 764 | 3571 |
| 2010 | 28001 | 9331 | 74,5 | 79,6 | 769 | 5768 |
| 2011 | 32008 | 11918 | 84 | 85,4 | 774 | 5963 |
| 2012 | 36970 | 14151 | 87 | 90,8 | 780 | 6541 |
| 2013 | 42623 | 16029 | 92 | 96,9 | 785 | 6985 |
| 2014 | 47865 | 19023 | 98 | 101,4 | 791 | 7384 |
| 2015 | 59852 | 22065 | 103 | 108,8 | 796 | 7964 |
| 2016 | 65322 | 23625 | 110,7 | 112,5 | 802 | 8431 |
| 2017 | 83900 | 27156 | 116,2 | 119,7 | 807 | 9457 |
| 2018 | 90984 | 29364 | 121 | 125 | 813 | 9842 |
| 2019 | 115435 | 33 820 | 134 | 133,9 | 819 | 11 400 |

Based on the values of the above factors, the following correlation matrix of double correlation coefficients representing the relationship between the volume of fish farming in natural and artificial water bodies and the factors affecting it was generated by the STATA software (Table 2).

Table 2

Matrix of double correlation coefficients with factors influencing the outcome indicator (fish farming in natural and artificial reservoirs) and the degree of correlation of factors

| | Y | X ₁ | X ₂ | X ₃ |
|----------------|--------|----------------|----------------|----------------|
| Y | 1 | | | |
| X ₁ | 0,9838 | 1 | | |
| X ₂ | 0,9804 | 0,9969 | 1 | |
| X ₃ | 0,9754 | 0,9979 | 0,9966 | 1 |

By constructing this matrix, it is possible to determine whether there is a dense connection between adjacent factors, i.e., whether there is multicollinearity. [12].

When analyzing the multicollinearity coefficient, a strong correlation between x_4 and x_5 factors was observed, so these factors were not included in the model. Also, the following trend functions were identified for each factor influencing it to forecast fish production in natural and artificial reservoirs.

The coefficient of determination came as follows.

$$D = R^2 = 0,97$$

However, a deficit of 0.03 units is a factor to be overlooked. Based on the results of calculations based on real numbers obtained using the above models and formulas instead of unknown numbers in the developed trend functions, the forecast prices for 2020-2025 were based on the dynamics of fish production in the years of 2009-2019.

In determining the overall quality of a multifactor linear regression econometric model, the determination coefficient (R^2) is calculated using the following formula:

$$R^2 = 1 - \frac{\sum_{i=1}^n (y_i - \hat{y}_i)^2}{\sum_{i=1}^n (y_i - \bar{y})^2} \quad (3)$$

y_i - the expected level of the outcome indicator;

\bar{y} - the arithmetic mean of the outcome indicator;

\hat{y} - determined, projected, flattened quantities of the outcome indicator; n – number of observations.

In a multifactor model, the correlation coefficient is very high: $R=0,97$. This means that the level of correlation between the resulting factor and the influencing factors is very high. Hence the high coefficient of determination: $D = R^2 = 0,97$. It follows that the impact of the above factors on Y-the volume of fish farming in natural and artificial reservoirs is 97%. The remaining 0.03 consists of factors which are not considered here.

The coefficient of determination is the percentage effect of the factors included in the model on the outcome. Indicators for all factors are expressed in values within the range [0; 1], which justifies the importance of the role of the factors included in the model in the objective assessment of the level of the resulting indicator, if their value is close to 1. On the other hand, in order to be able to compare the models with different quantities of factors and the amount of these factors does not affect the statistical indicator R^2 , a flattened determination coefficient is usually used, that is:

$$R_{\text{текис}}^2 = 1 - \frac{s^2}{s_y^2} \quad (4)$$

To determine the statistical significance of this multifactor regression model and its relevance to the process under study, Fisher's F-criterion is used and the following formula is used to calculate its value [13], that is:

$$F = \frac{R^2}{1-R^2} * \frac{(n-k-1)}{k} \quad (5)$$

here: n – number of observations;

k - the number of factors in the multivariate regression equation.

In the next step the calculated value of Fisher's F-criterion (F_{calc}) will be compared with the theoretically calculated value ($F_{tab}(\alpha; k; n-k-1)$). If $F_{calc} > F_{tab}$, then the model used is significant or adequate to the process being studied. The reliability of the multi-factor regression econometric model parameters and correlation coefficients is then checked on the basis of the Student's t -criterion. Their values are compared with the values of random errors using the following formula [14]:

$$t_b = \frac{b}{m_b}; t_a = \frac{a}{m_a}; t_r = \frac{r}{m_r}. \quad (6)$$

The random errors of the parameters and correlation coefficients obtained on the basis of the application of the econometric model are calculated according to the following formulas [15]:

$$m_b = \sqrt{\frac{\sum(y - \hat{y}_x)^2 / (n - 2)}{\sum(x - \bar{x})^2}}; \quad (7)$$

$$m_a = \sqrt{\frac{\sum(y - \hat{y}_x)^2}{(n-2)} \cdot \frac{\sum x^2}{n \sum(x - \bar{x})^2}} = \sqrt{S_{residue}^2 \frac{\sum x^2}{n^2 y_x^2}} = S_{residue} \frac{\sum x^2}{n y_x}; \quad (8)$$

$$m_{r_{xy}} = \sqrt{\frac{1 - r_{xy}^2}{n - 2}}. \quad (9)$$

The results obtained on the basis of the above econometric model and its structural formulas are compared with real indicators in practice, and appropriate conclusions and recommendations are developed.

The results of the calculations performed using the EXCEL program on the basis of the statistical values given in Table 1 of this paragraph are given in Tables 3 and 4 below. In particular, the functional formula of the multifactor regression econometric model selected using the data in Table 3 is as follows:

Table 3
Levels of correlation of factors influencing the outcome indicator are a matrix of double correlation coefficients

| | Non-standardized coefficients | | t-statistics | Probability |
|------------------|-------------------------------|---------------|--------------|-------------|
| | Coefficient | Default error | | |
| Constanta | 103918,1 | 81511,22 | 1,27 | 0,24 |
| X1 | 7,7325 | 3,3234 | 2,33 | 0,053 |
| X2 | 679,74 | 1111,67 | 0,61 | 0,560 |
| X3 | -2587,747 | 1399,48 | -1,85 | 0,243 |

The fact that the calculated coefficient of determination R^2 is 0.97 indicates that the result is strongly correlated with the included factors, and the remaining 0.03 percent can be considered as the effect of marginal factors that are not included in the calculation table.

Table 4.**Criteria for checking the quality and importance of a multifactor econometric model**

| Multifactor correlation coefficient, R | Multifactor determination coefficient, R-square | Corrected R-square | Default error of evaluation | F-calculated | DW |
|--|---|--------------------|-----------------------------|--------------|------|
| 0,97 | 0,97 | 0,96 | 3,32 | 67,9 | 1,91 |

The correction coefficient of correction is equal to 0.97 and the relative proximity of R^2 is the level of values that arise depending on the change in the number of factors influencing the resulting result.

Considering this, the following model was generated performing a multi-factor linear regression model in EXCEL based on the above data:

$$\hat{y} = 103918,1 + 7,73x_1 + 679,74x_2 - 2587,74x_3$$

The analysis of this solution is as follows: free value 103918.1 is not analyzed. At the same time, the factor x_1 , ie X_1 -the expansion of artificial reservoirs, is directly proportional to the outcome factor when increased by 1 unit, and the increase of this factor ensures the growth of the outcome factor. When X_2 - increases the volume of fish fry, Y- the volume of fish in natural and artificial reservoirs increases by 679.74 units, and in X_3 -the organization of fishing in the water basins, Y-the volume of fish farming in the natural and artificial water basins decreased by - 2587.74.

Among these factors is X_2 -the increase in the production of fish fry, which has the greatest impact on Y-the volume of fish farming in natural and artificial reservoirs. The next is X_1 -the expansion of the artificial reservoirs. X_3 - The volume of fish farming in natural and artificial reservoirs has an adverse effect.

Hence, the multifactor model used is adequate and can be used to forecast fish production volumes for future periods.

Table 5.**Forecast indicators of changes in fish production volumes for the years of 2020-2025**

| Years | Fish farming in natural and artificial reservoirs (tons) | Expansion of artificial reservoirs (hectares) | Increase the production of fish fry (million units) | Organization of fishing in water basins (million units) |
|-------|--|---|---|---|
| | Y | X1 | X2 | X3 |
| 2009 | 22811 | 8142 | 70,5 | 73,8 |
| 2010 | 28001 | 9331 | 74,5 | 79,6 |
| 2011 | 32008 | 11918 | 84 | 85,4 |
| 2012 | 36970 | 14151 | 87 | 90,8 |
| 2013 | 42623 | 16029 | 92 | 96,9 |

| | | | | |
|--------------|--------|--------|-------|-------|
| 2014 | 47865 | 19023 | 98 | 101,4 |
| 2015 | 59852 | 22065 | 103 | 108,8 |
| 2016 | 65322 | 23625 | 110,7 | 112,5 |
| 2017 | 83900 | 27156 | 116,2 | 119,7 |
| 2018 | 90984 | 29364 | 121 | 125 |
| 2019 | 115435 | 33 820 | 134 | 133,9 |
| 2020* | 108415 | 34741 | 135 | 137.4 |
| 2021* | 117003 | 37279 | 141 | 143.2 |
| 2022* | 125590 | 39818 | 147 | 149.0 |
| 2023* | 134178 | 42356 | 153 | 154.9 |
| 2024* | 142766 | 44894 | 159 | 160.7 |
| 2025* | 151354 | 47433 | 165 | 166.5 |

According to the results of calculations based on real numbers obtained using the above models and formulas instead of unknown numbers in the developed trend functions, the forecast for the years of 2020-2025 was based on the dynamics of fish farming in natural and artificial reservoirs in the years of 2009-2019.

According to the forecast, by 2025, fish farming in natural and artificial reservoirs will reach 1513,554 tons, expansion of artificial reservoirs - 47,433 hectares, and in 2025, compared to 2019, fish production in natural and artificial reservoirs will be increased by 1.3 times.

CANCLUSIONS AND RECOMMENDATIONS. Given the potential for expansion of land and water areas at the disposal of fisheries, their future management and development can be predicted in a sense. We can create competition by allowing the emergence of production in fisheries to grow products that meet market demand. The study identified the following conceptual areas for future development and income generation of fisheries:

- ✓ it is necessary to expand the land and water areas at the disposal of fisheries, to introduce modern intensive technologies, fish species suitable for our climate in places where this is not possible at all;
- ✓ creation of all opportunities for fishery production, finding solutions to problems and improving credit mechanisms;
- ✓ enabling the production of mixed fodder on the basis of fisheries and the possibility of establishing a direct supply contract between enterprises producing mineral fertilizers;
- ✓ establishment of a mechanism for processing fishery products;
- ✓ development and improvement of measures for the sale of fishery products.

REFERENCES:

1. Authors calculations based on the data from FAOSofiaReport 2016 andGlobefishHighlighOctober 2017; FAOFoodOutlookJune 2016, EUMOFAMonthlyHighlights 4/2016.
2. B.G.Komilov, I.I.Khalilov “Growing river trout is a high-income agro-commercial opportunity for farmers in Uzbekistan” <http://sgp.uz/uz/news/1029>.

3. Scientific-methodical booklet on the study of the State Program for the implementation of the Action Strategy on the five priority areas of development of the Republic of Uzbekistan in 2017-2021 in the “Year of dialogue with the people and the interests of man”. Tashkent. 2017. p -130.
4. Authors calculations based on the data from FAO Sofia Report 2016 and Globefish Highligh October 2017; FAO Food Outlook June 2016, EUMOFA Monthly Highlights 4/2016.
- 5.Макконелл К., Брю С. Экономикс: принципы, проблемы и политика в 2 т.: Пер. с англ. Таллин, 1993 г.
- 6.A.R.Kurbonov. Growing fish species in the future. Booklet.-2017. p-50;
7. Okumus, I. 2005. The marine aquaculture and management in Turkey. Rize, Faculty of fisheries, Rize University, 13pp.;
- 8.Patel, A.B., Yakupitiyage A. 2003. Mixed feeding schedules in semi-intensive pond culture of Nile tilapia, *Oreochromis niloticus* L.: is it necessary to have two diets of differing protein content. *AquacultureResearch*, 34: 1343-1352.;
9. О.В.Кузнецова.Управление формированием региональных кластеров рыбоводстваИжевск-2012-194с
- 10.Эргашев Р.Х.,Беглаев У.Х. The Ways Of Fishing Farms Management And Developing The Production ActivityINTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH,2020. - Vol 9, Issue - 02,- p. 919-921.<http://www.ijstr.org/paper-references.php?ref=IJSTR-0120-28990>
11. Ergashev, R. K., and A. D. Ravshanov. "Ways of Strategic Development and Increase of Competitiveness of Agricultural Enterprises." *JournalNX*, vol. 7, no. 1, 2021, pp. 99-105.
12. .Rakhmatillo E., Anvar K., Sukhrob M. FOREIGN DIRECT INVESTMENT, ECONOMIC GROWTH AND EMPLOYMENT: VAR METHOD FOR UZBEKISTAN //Journal of Contemporary Issues in Business and Government. – 2021. – Т. 27. – №. 2. – С. 1757-1769.
13. DimitriosAsterio and Stephan G.Hal. Applied econometrics. A modern approach using Eviews and Microfit. Revised edition. Palgrave Macmillan, New York, 2007. – p.397): [101; с. 65-66].
14. И.И.Елисеевой. Эконометрика:Учебник. / Пордред,, – М.: 2003,- 344с. (ст 53-54).
15. Эконометрика:Учебник./ Под ред. И.И.Елисеевой. – М.: Финансы и статистика, 2003, - 344 с.
- 16.Эргашев Р. Х., Хамраева С. Н., Файзиева Ш. Ш. ИННОВАЦИОННОЕ РАЗВИТИЕ ИНФРАСТРУКТУРЫ СЕЛЬСКОГО ХОЗЯЙСТВА: ПРОБЛЕМЫ И ПУТИ ЕГО ДОСТИЖЕНИЯ //Феномен рыночного хозяйства: от истоков до наших дней. Партнерство в условиях риска и неопределенности. – 2020. – С. 310-319.
- 17.Эргашев Р. Х., Хамраева С. Н. СОВЕРШЕНСТВАВОННИЕ МЕХАНИЗМЫ ИННОВАЦИОННОГО РАЗВИТИЯ ИНФРАСТРУКТУРЫ СЕЛЬСКОГО ХОЗЯЙСТВА //Друкується за рішеннямВченої ради Державного університету «Житомирськаполітехніка»(Протокол № 12 від 25.11. 2019 р.) Редакційнаколегія: д. е. н., проф. ВВ Євдокимов. – 2019. – С. 355.
18. Khidirovich E. R. APPLICATION OF DIGITAL TECHNOLOGIES IN AGRICULTURE. – 2021.
- 19.Khidirovich E. R., Bokiyevich K. A. STATE SUPPORT FOR SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP IN UZBEKISTAN. – 2021.

20. Khamraeva S. N. Methodological foundations of innovative development of agricultural infrastructure //Journal of Management Value & Ethics. – 2018. – T. 8. – №. 1. – C. 10-17.
21. KHAMRAEVA S. N. Forecasting innovative development of infrastructure providing services to agriculture //Journal of Contemporary Issues in Business and Government. – 2021. – T. 27. – №. 2. – C. 4037-4045.
22. KHAMRAEVA S. N., ALIMOVA M. Y. Methodological bases for assessing the level of innovative development of agriculture and its service infrastructure activities //Journal of Contemporary Issues in Business and Government. – 2021. – T. 27. – №. 2. – C. 4062-4068.
23. Nasimovna K. S., Ilkhomovich O. I. STATUS AND ANALYSIS OF THE DEVELOPMENT OF WORLD ELECTRONIC TRADE SERVICE //World Economics and Finance Bulletin. – 2020. – T. 1. – №. 1. – C. 9-11.