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TRENDS OF QUANTITATIVE CHANGES IN THE CONDITIONS OF INTENSIVE DEVELOPMENT OF THE FISHING INDUSTRY

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Abstract

In the context of sustainable development of agriculture, intensive development of the fishing industry and as a result of reforms carried out in the industry, meeting the population's demand for fish and fish products is considered one of the most pressing tasks today. Therefore, the article presents the results of successive reforms implemented in the intensive fishing industry, indicators of fisheries in the region, as well as conclusions and proposals for further development of the industry.

Keywords: *implemented successive reforms, per capita consumption, intensive fish farming, aquaculture, fish products, biological diversity, state support.*

Introduction. Since the first days of the republic's independence, during the implementation of socio-economic reforms aimed at forming market skills in the fishing industry, various forms of ownership have appeared in the fishing industry, as well as socio-economic and organizational-normative conditions. were created. As a result of the implemented successive reforms, the basis for competitive activities of fish farms in the industry has been created.

Due to the great attention paid to the development of fisheries, fish farming in our country is increasing every year. Today, intensive fishing is developed in our country and such fish as carp, grass carp, and white amur are grown in ponds. 2,586 farms specializing in fishing grow fish on 19.8 thousand hectares of artificial reservoirs and more than 500 thousand hectares of natural reservoirs. The average productivity of natural lakes is 28.7 c/ha, and the average productivity of artificial ponds is 15.4 c/ha [2].

Materials and methods. According to the analysis of the average per capita consumption of basic food products in the country, the consumption of fish and fish products (canned goods, caviar and other minor products) in 2023 averaged 5.4 kg per capita. This figure increased by 1.13 times or 0.6 kilograms compared to 2015, and in 2019 decreased by 25% compared to 2015. By 2021, compared to 2019, it increased by 1.36 times, that is, by 1.3 kg. The fish consumption standard is set at 13.37 kilograms, and today the population consumes fish products 7.97 kilograms less than the standard (see Figure 1).

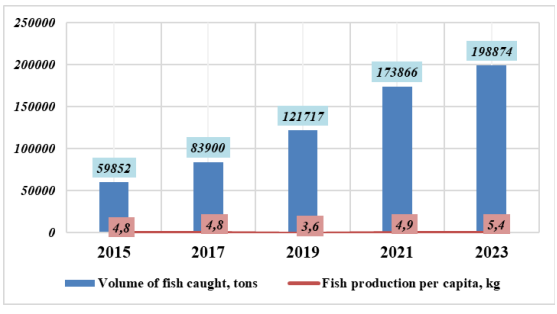


Figure 1. Results of reforms implemented in the context of intensive development of the fishing industry [6, 8].

Breeding of farm animals, poultry, fish and bees, as well as increasing the volume of production is one of the pressing issues of our time for the regular provision of the population of the republic with food products. Taking this into account, important tasks in the livestock industries are considered to be the improvement of selection and productivity indicators, the correct conduct of selection and breeding work and the conduct of large-scale selection work [7].

Our country is implementing comprehensive measures to modernize agriculture and accelerate the development of the fishing industry. Development of fisheries, conservation of biological diversity, a comprehensive approach to solving issues related to fish farming using intensive methods (cages, closed water circulation systems, small intensive ponds) can be considered one of the main tasks of economic reforms in the agricultural sector. According to the trend of structural and quantitative changes in the network, after the emergence of various forms of ownership, as a result of the formation of market relations, the volume of fish production and fish consumption by the population have increased in recent years. years.

According to the analysis, the largest percentage of fish catch in 2023 is in the Khorezm region (15.6%), Tashkent region (13.6%), Andijan region (10.9%), Samarkand region (9.0%), Namangan region (7.8%), Jizzakh region (7.6%), Navoi region (6.9%) and Fergana region (6.7%) (see table1).

Table 1.

Indicators of changes in the size of fish caught in the country [8, 9] (ton)

№	Name of regions	2015	2017	2019	2021	2023	In 2023 compared to 2015, (%)
1.	Republic of Karakalpakstan	3 410	6 157	12847	14454	11597	3.4 times
2.	Andijan region	2 535	4 081	11048,6	17663	21672	8.5 times
3.	Bukhara region	1 951	3 400	5798,3	11421	11004	5.6 times
4.	Jizzakh region	10 850	13 838	10314,9	13139	15098	139.1
5.	Kashkadarya region	3 151	4 770	5714,4	6505	5026	159.5
6.	Navoi region	5 610	12 566	11997,6	13503	13743	2.4 times
7.	Namangan region	2 733	5 218	6931,6	11187	15434	5.6 times
8.	Samarkand region	1 839	3 435	8974,1	21982	17961	9.8 times
9.	Surkhandarya region	1 911	3 876	3610,8	4977	6882	3.6 times
10.	Syrdarya region	1 822	2 222	9994,1	5933	9058	5.0 times
11.	Tashkent region	11 557	8 155	7896,6	10222	27125	2.4 times
12.	Fergana region	4 025	6 782	10567,6	11763	13341	3.3 times
13.	Khorezm region	8 457	9 401	16021,4	31117	30933	3.7 times
	TOTAL	**59 852**	**83 900**	**121717**	**173866**	**198874**	**3.3 times**

Also, according to the analysis in 2023, compared to 2015, it is clear that the volume of fish catch in the republic increased by 3.3 times. In all regions during this period, there was a significant growth trend for this indicator. Compared to 2021, the volume of fish catch in 2023 increased by 14.4 percent. However, in some regions, including the Republic of Karakalpakstan (80.2%) and Bukhara (96.3%), Kashkadarya (77.3%), Samarkand (81.7%), Khorezm (99%) regions, the volume of fish catch may be It can be seen that it has decreased compared to 2021.

In addition, during the analyzed periods, high fish farming rates were achieved in Samarkand (9.8 times), Andijan (8.5 times), Namangan (5.6 times), Bukhara (5.6 times), and Syrdarya (5 times) regions. Of course, the reason for this today is, firstly, increased attention to the development of the fishing industry, and secondly, the

development of intensive aquaculture in this industry, the effective use of natural and artificial reservoirs, an increase in fish production volumes, fish farming using intensive pools and the introduction of fish farming in households.

According to the analysis of all categories of farms, in 2023, fish farms will produce 98,572 tons of fish, which is 49.6% of the volume of farmed and caught fish in our country. Agricultural organizations grew 10,342 tons of fish (5.2 percent of the total) and 89,960 tons of fish (45.2 percent of the total) (see Table 2). The main reason for such growth rates is the development of intensive fisheries in the republic, and the issues of fish farming, self-employment, and creation of new jobs are becoming relevant even in farms based on the "one microdistrict - one farm" system. This year, it is planned to grow fish in more than 9 thousand households.

Table 2.

Volume of fish farming in the republic (by farms of all categories) [8] (ton / %)

№	Regions	Years					Compared to 2015, change (% or times)
		2015	2017	2019	2021	2023	
1.	Farm holdings	18242,5 *30,5%*	33264,3 *39,6%*	48184,2 *41,7%*	81852 *46,9%*	98572 *49,6%*	5.4 times
2.	Dehkan farms.	10975,1 *18,3%*	8895,7 *10,7%*	9863,3 *8,5%*	10091 *5,8%*	10342 *5,2%*	94.2
3.	Organizations engaged in agricultural activities.	30633,9 *51,2%*	41740,4 *49,7%*	57387,2 *49,7%*	82193 *47,3%*	89960 *45,2%*	2.9 times
Total for the republic		**59851,5** ***100%***	**83900,4** ***100%***	**115434,7** ***100%***	**173866** ***100%***	**198874** ***100%***	**3.3 times**

In our republic, fish are grown using various methods of fish farming. Today, there are 7 different methods of fish farming in the country. These are: fish are kept in natural ponds, artificial ponds, cage structures, small ponds of the intensive method, rice fields, households and a closed water circulation system. The most common method is, of course, fish breeding in artificial ponds. Currently recognized as advanced technologies (intensive), intensive methods in small and medium-sized reservoirs can significantly contribute to the development and increase in the efficiency of the fishing industry. However, experts emphasize that these methods cannot always be used in all regions.

Conclusions and suggestions. Based on the opinions expressed, it can be said that, based on the results of successive reforms in the field of fisheries in the republic, in order to further develop the industry, it is advisable to pay attention to the following important aspects:

- implementation of scientific and practical projects, scientific works on a large scale and increasing their efficiency for the development and efficiency of the fishing industry;

- wide application of cage (cage) method of fish farming in large reservoirs using water resources of reservoirs in order to improve food supply of the population in accordance with medical standards;

- improve food supply of the population by processing fish products, acclimatization and breeding of new species of fish in the regions in order to strengthen food security, improve the well-being of the population by ensuring permanent employment and increasing its income;

- further strengthen state support for the development of the fishing industry, provide them with more benefits in the tax, insurance, financial and credit systems, as well as increase food production in the regions, improve the quality of services by creating a favorable investment climate;

- to a certain extent cover the costs of feed and fertilizers included in the cost of production during the development of the fisheries industry, improve the mechanisms of state support in organizational and economic relations associated with the introduction of appropriate technologies, for example, the allocation of subsidies to the industry and credit benefits, etc.;

- it is necessary to further improve the system for improving the modern knowledge and skills of fisheries specialists and technical personnel;

- Lakes with an area of 4-5 hectares are practically more productive than large lakes, it is easier to feed fish in them. The volume of blue ammophos solution in a lake with an area of 10 hectares is different, and in lakes with an area of 4-5 hectares this indicator can be the same;

- it is advisable to make ditches next to each lake to regulate the level of seeping water as much as possible;

- for fish farming it is important to provide unprofitable lands for planting cotton near running water, that is, if there is "clean land" and "clean water", the fish will be of good quality;

- the issue of insurance: the risk in fishing is "extreme"! When we throw fish fry into the lake, we do not see how it develops. Insurance is very important for fishing.

In conclusion, it should be noted that in order to meet the growing year-on-year demand of the population for fish and fish products according to medical standards, it is necessary to carry out large-scale work on the ground. As a result of increasing the volume of fish products, improving the organizational and economic foundations of the feed base, training and improving the skills of qualified specialists, optimal placement of fish farms, rational use of natural and artificial reservoirs, increasing the efficiency of fish farming, the fishing industry will continue to develop, new jobs will be created, and nutrition and food supply of the population will improve.

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