

# Ways of organizing sustainable development of fish farming and adaptation to market management mechanisms

Beglaev Uchkun Xurramovich

Independent researcher

Department of Agribusiness and Investment Activities,  
Tashkent State Agrarian University, Tashkent city, Uzbekistan  
Email – agrobiznes20@bk.ru

**Abstract:** *The article provides recommendations for improving fisheries management in adapting to market principles, with particular emphasis on the development of an integrated relationship between fisheries and other agricultural enterprises.*

**Key Words:** *fish farming, management, integration, food supply, market principles, fish products, organization.*

## 1. INTRODUCTION:

Taking full advantage of the opportunities available for sustainable economic development encourages farmers, enterprises, firms or organizations to seek profit and maximize profits. The economy is governed by self-government through a market mechanism.

Realization of the tasks outlined in the strategy of action on five priority areas of development of the Republic of Uzbekistan from 2017-2021, further support of agricultural production, ensuring the efficient use of farms, dekhkan farms and household plots, as a result, increasing the income of landowners is an important priority for further development.

## 2. LITERATURE REVIEW:

The economists of our country and foreign countries conducted research in various fields on the sustainable development of fisheries in a market economy, improving effective management systems, and innovative development of the industry. In particular, scientists from foreign countries: Paul D., Annecy S., Nguyen V.T., Denisov N.I., Tomme M.F., Berkis F., Mahon R., Willem I., Heinrech J., Bastardi F., Solomon M., Akker H., Dross M., D. Wilson., Daniel P., Johnston FD, Tommas A.S., Hammerland S., Greer K., Matias J., Dyachkov M.I., Popov I.S., Liskun E.F., Solun A.S., Pshenichny P.D., Bogeruk A.K., Makkol P., Polnak R., Pomena R., Bardach Yu. , Maiseenkova T.V., Alesina N.V., Aldaka P., Khachaturova T., Galuliniya R.R., Yakubova D.Sh., Gordon Yu.M., Kiselev V.K., Dushin P.A., Tarasenko A.A., Kazancheva V.S., Yusupov S.Yu., Akhmedov A., Zakirov M.Yu., Shokhimardonov D.R., Gulyamov S.S., Ergashev R.Kh. other. The studies conducted by the aforementioned economists are mainly devoted to the general aspects of fish production and improving the efficiency of fisheries. In addition, an analysis of scientific sources and research shows that the vast majority of them focus on the development of fisheries and the solution of common economic problems.

## 3. METHOD:

To solve the tasks posed in the work, general scientific and special methods of cognition were used as tools: comparative, economic and statistical grouping of data, tabular methods of economic analysis and synthesis, graphical method, generalization method, expert assessment method, etc.

## 4. ANALYSIS AND RESULTS:

Today, the role of fish farming in ensuring the country's food security is immeasurable, and in the foreseeable future, their importance will increase significantly.

Studies show that currently the potential of the fishing sector is underused. There are a number of objective and subjective reasons for this, and one of the main factors is the lack of economic mechanisms necessary for the development of fishing.

Our study is aimed at the development of fish farming not only as a manufacturing sector, but also for the production of fish products. In our opinion, a change in the types and directions of fisheries specialization is possible.

This is due to the fact that most of the surveyed fish farms indicated that the area of fish ponds needed to be expanded. We all know that the problem of restrictions in the economy concerns land in the first place. Therefore, it is very important and important to look for ways to strengthen existing areas, and not to expand the area.

Thus, if we create bio-farms in the Republic of Uzbekistan, using foreign experience for the production of bio-feeds, the future will also be a profitable agricultural sector. In particular, the introduction of new fish species will increase the profitability of products.

At the same time, the economically sustainable development of fisheries, conversion to more productive farms is caused by the lack of necessary technical equipment, the lack of cooperation with other enterprises, and the lack of a product procurement system.

Inadequate integration of fish farming with other agricultural sectors is one of the main obstacles to the sustainable development of agricultural activities. It is advisable to pay special attention to the development of integration of fish farming with other agricultural enterprises, paying particular attention to management, namely:

- it is preferable to use a modern management system in fisheries;
- creating the most favorable conditions for improving fisheries management and the efficient use of production potential;
- the development of fish farming is difficult without the support of other agricultural enterprises, infrastructure and local governments;
- insufficiently developed and inadequate production capacities in the agricultural sector do not provide the population with the necessary assortment and a sufficient amount of agricultural products.

From this point of view, it is important to establish close integration with fishing and other enterprises in this process in order to provide the necessary resources and sell products grown in favorable conditions for dekhkan farms.

It is worth noting that today there is no clearly regulated, convenient supply chain for fish farming. Providing fisheries with the necessary resources is mainly provided by private individuals. This limits their access to quality resources.

Without solving the above problems, it is impossible to develop fish farming. One of the main ways to solve this problem is to create a separate system for providing services to dekhkan farms in the country and region.

Therefore, in our opinion, the creation of such organizations on the ground will provide practical support to fisheries, and fisheries will be able to solve each of the problems they face. To do this, it is necessary to solve the following tasks:

- pool cleaning as practical assistance in organizing production, creating a feed base and providing modern technologies;
- providing fish farms with necessary resources and means, such as seeds, mineral fertilizers, animal feed and construction materials, veterinary services, etc. ;
- sale of fish products prepared by farms;
- processing of fish products requires canning, drying, freezing and similar processing technologies based on local and foreign technologies.

In our country, adapting the management system to market principles is an important task, and the production of products that are in demand on the market remains a serious problem.

Most of the fishery products are sold independently, without processing, which leads to the same functioning and lack of sources of income. We believe that to increase income from fish farming it is advisable to do the following:

Establish a cooperative relationship with mini fish processing technologies. Studies show that in Karshituman of the Kashkadarya region in 2018 there were 2559.0 tons of fish. Most of this fish is sold directly to markets that are practically not processed and are converted into low-quality products.

Firstly, it is necessary to develop a market strategy and liberalize the sales order. Secondly, it is possible to achieve positive results in the processing of fish products using mini-technologies. If each farm processes 60% of the annual output, this will create greater opportunities for economic activity, income generation and sale of finished products.

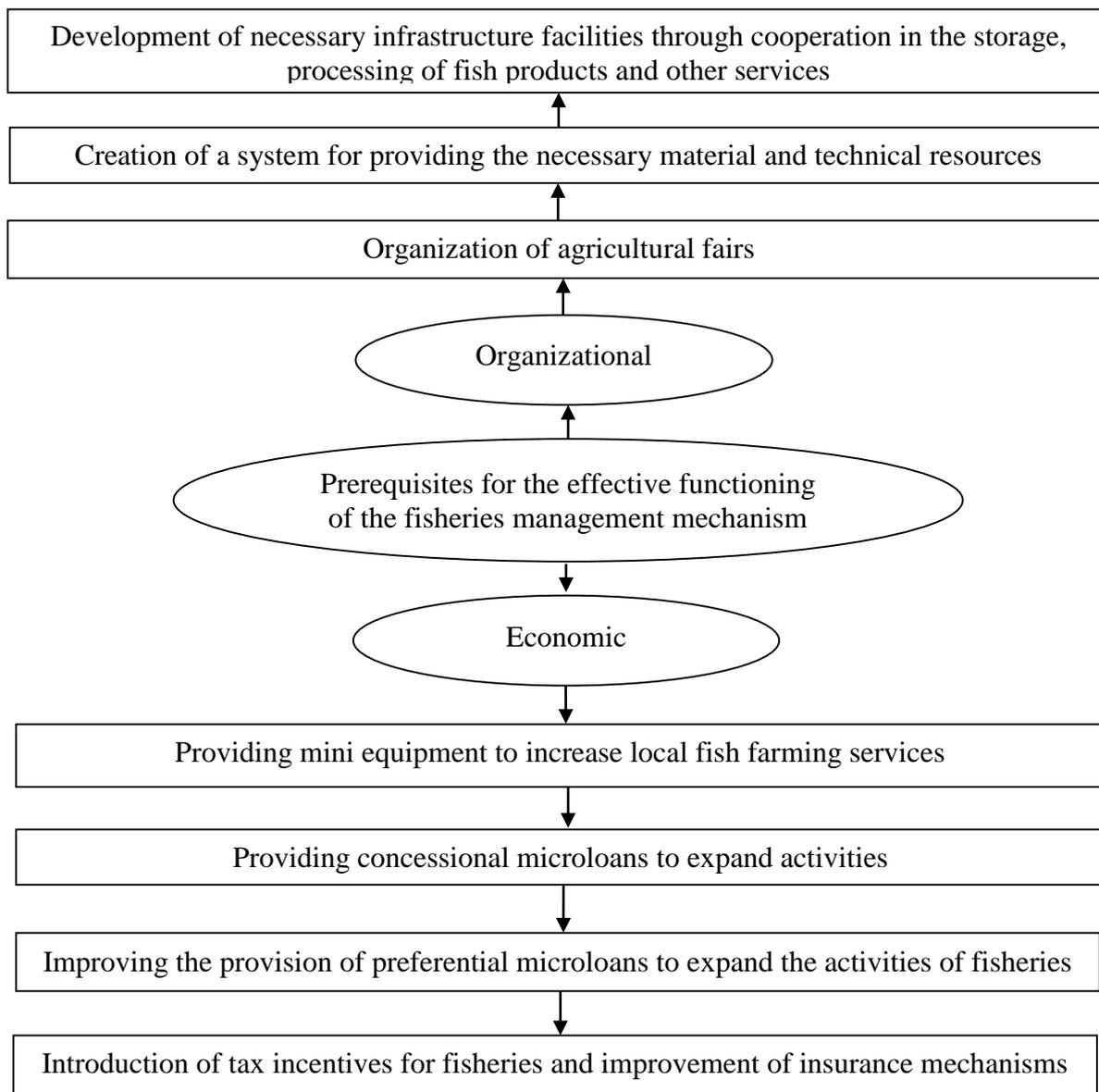
Creating conditions for fish farming to sell their products directly on the market. Currently, almost all of the 245 fisheries in the region are experiencing problems with the sale of products and have not received legal status.

What does it mean? Fish companies do not have their own account and do not trade through a bank.

However, during the time of global financial globalization, the banking system is improving, most fisheries do not use banking services when people make all payments using electronic money (plastic cards). While cashless transactions are carried out, dekhkan farms are forced to sell their products to “shakers” at a low price, even for half the price.

For the development of fish farming to be possible, it is necessary to create a comprehensive service center for fish farming. It is also advisable to allow private providers access to the lower levels of the system on a voluntary basis.

Figure 1 shows the directions for creating effective fisheries management mechanisms in accordance with market principles and creating the necessary organizational and economic conditions for their profitable activities.

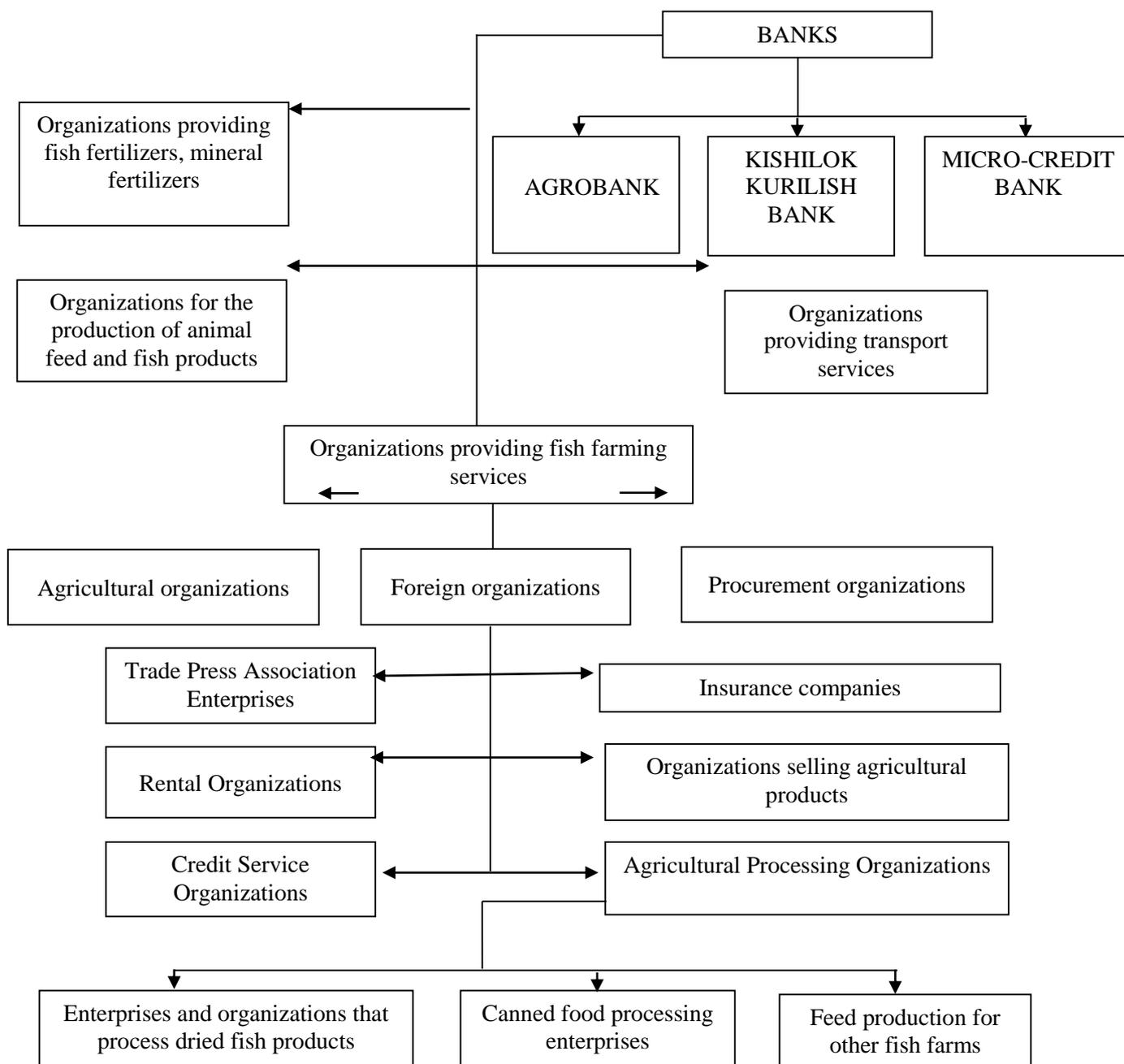


**Fig. 1. Directions for improving fisheries management mechanisms and creating the necessary conditions for their effective activities**

Directions for improving fisheries management in adapting to market principles include the following:

- review and improvement of the management structure of fish farms;
- Improving the mechanism of stimulating fish farming as a legal entity;
- development and implementation of recommendations for creating equal legal conditions for other farms in the production, sale and servicing of fisheries;
- ensuring access for employees to fish farms, as well as legal aspects of this area. Since there are an average of 7 people in some fisheries, 3-4 of them work, and there is a need for additional labor;
- the creation of contractual mechanisms and management mechanisms in fisheries (if they have the status of legal entities) and the preparation of business plans.

It is advisable to strengthen the ties of fisheries with the agricultural sector. In general, the stronger the relationship between fish farming and organizations, the further the structure of farm management will change (Fig. 2).



**Fig. 2. Organizations requiring contact with fish farming**

In the graph below, we see that fish farming should be integrated into the process. Economic relations and integration ties with organizations are factors in the development of fisheries.

Fisheries will need to effectively use banking services as a legal entity. In particular, in 2018, Kashkadarya region allocated more than 5 billion soums for loans. Given the extent of this shortcoming, it can be seen that relations between banks and farms are poor.

Establishing contacts with organizations operating in the country and abroad will provide economic and social support to the economy.

Improving the relationship between farms and organizations and the proper lending system between banks and the processing of inter-farm contracts is a key issue, but the lack of links between fisheries and organizations creates many problems.

**5. CONCLUSION:**

Today, as a result of the implementation of adopted laws and decisions on fish farming, there is a significant improvement in the activities of farms. The action plan for the development of Uzbekistan for 2017–2021 is aimed at a fundamental restructuring of agriculture in the coming years in order to increase production volumes.

In Kashkadarya alone, promising plans were developed to increase fish production by 2021, increase fish production by 10,000 tons, produce new types of fish, and store and process fish products up to 1,200 tons.

In addition, it is necessary to increase the food security of farmed fish products and prevent a sharp increase in their prices in the domestic market by:

- increase the production of fish products;
- Creation of fish farms using modern technologies and the sale of highly profitable products;
- fisheries management, efficient and rational use of available resources.

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