Urgency of the research. The article describes the main proposals according regulation national market of fish products in the context of formation of global product systems and regional markets. The recommendations for influence on the supply of marketable fish and the production of fish-planting material in Ukraine.

Target setting. The article aims at studying the problematic aspects of isolation and development of modern market regulation measures of aquaculture products.

Authors have made emphasis on the need to provide guidance for the purpose of calculation of key indicators marketable of fish production in Ukraine.

Actual scientific researches and issues analysis. Addressing the same agricultural market occupies a leading place in scientific works S. Kvasha, M. Hazudy, L. Shynkaruk and other scientists. However, despite the significant number of publications and the fairly extensive research of market functioning, features aquaculture production agrarian market only focuses on fragmented and not always taken into account at its state in specific production periods.

Uninvestigated parts of general matters defining. The main problem that hinders the necessary level of aquaculture products development is the lack of methodological component. For fully estimate of output of marketable fish that comes from farms, not just in the amount of legal fishery producers, with purpose to influence on supply of fish on the market.

The research objective is developing of methodological recommendations for the calculation of key indicators of marketable fish production in Ukraine according to the integration processes in economic development.

The statement of basic materials. Over the past fifty years, the global supply of food fish exceeded the growth rates of the world. Now the fish products form an important source of food and calorie of animal protein for the inhabitants of the globe. After entering the exclusive economic zones, fishing in most states recognized the limited natural resource base and is focused on supply of aquaculture products. Thus, in the article is the developing of recommendations for calculation of the annual performance payments marketable fish production in Ukraine.

Conclusions. After calculation of output of marketable fish in the absence or lack of data for some indicators or territories (areas) for adjustment of parameters to improve the reliability of the calculations should use additional sources of information.

Keywords: fisheries; manufacturing; aquaculture; market; demand; regulation; guidelines.

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Urgency of the research. Modern scientists’ transformation processes lead to actualize their activities towards finding a scientific problem solving strengthening control measures on industry markets. Is no exception and the market of aquaculture products, as the production and sale of these products worldwide demonstrates the importance of the fisheries sector. Therefore the question of coverage and the development of scientific and reasonable proposals to regulate the domestic market of aquaculture products in the context of global food systems and regional markets is an important and almost essential. Therefore appropriate in this case will develop guidelines to ensure adequate conditions for the presence of various interests of consumers and market player’s fish and isolating the role of the state to run in really able to influence the offer of commercial fish and fish planting material.

Target setting. The article aims to study the problematic aspects of the issue of isolation and development of modern market regulation measures aquaculture products. Made emphasis on the need to develop proposals and provide guidance for the purpose of calculation of key indicators marketable fish production in Ukraine and achieving the objectives of import on the domestic market domestic products to consumers at reasonable prices.

Actual scientific researches and issues analysis. Contemporary issues regulation of foreign scientists studied such as Porter [1], Paul Samuelson [2], Dzh. Stihlits [3], J. Sismondi [4], Hallenstvent A. [5] and other scientists who assumed known researchers on fundamental issues of economics. Addressing agricultural market is forefront in scientific works Kvasha C. [6; 9; 11], A. Dibrova [7], M. Hazudy [8], L. Shynkaruk [10] and other scientists. However, despite the large number of publications and the fairly extensive research market operation, characteristics of the domestic market of aquaculture products only focuses fragmentary and not always considered his condition a specific production periods.

Uninvestigated parts of general matters defining. Uninvestigated parts of general matters defining. The main obstacle that hinders the necessary level of development of the aquaculture products is the lack of methodological component. It is therefore necessary to make count in output of marketable fish coming from a farm, not just in the volume of legal entities to influence the proposal as marketable fish and planting material in the domestic market.

The research objective. Develop guidelines for the calculation of key indicators marketable fish production in Ukraine in view of integration processes in economic development.

The statement of basic materials. Fisheries play an invaluable role in ensuring the well-being and prosperity around the world. Over the past fifty years, the global supply of food fish exceeded the growth rates of the world. Now the fish forms an important source of high-calorie food and animal protein for many inhabitants of the globe. Fisheries are a source of income for a large part of the population. After entering the exclusive economic zones, most global fishing nations realize the limited natural resource base and focused their attention on aquaculture production. However, current realities require development proposals and provide guidance for the purpose of calculation of key indicators marketable fish production in Ukraine and achieving the objectives of import substitution in the domestic market for domestic producers. For this, we have attempted to develop guidelines that include system parameters that directly characterize the dimensions of space, weight, fish productivity and volumes growing production of marketable fish in farms of all categories at the regional and national levels, basic approaches, methods and sources used when calculated, formation of annual performance.

When calculated in terms of groups was discharged that business entities for the purposes of aquaculture are legal and physical persons engaged in the production of planting material and commodity fish in aquaculture conditions. Also for aquaculture purposes may be employed as special water - technological fishery ponds and other water bodies, provided the subject of aquaculture lease. In addition, cultivation of marketable fish in waters fishery technology takes place according to process requirements with the use of intensification. These include fish feeding, disease prevention, improving health and aft base. Also for aquaculture purposes may be granted water bodies - reservoir (excluding reservoirs comprehensive destination), ponds, lakes and natural reservoirs are closed. Given the practical importance of these guidelines during the calculation of marketable fish production should be used to run the following approaches: a) to carry out calculations on whole areas of aquaculture; b) In determining the areas of water initially set total area, and the defined structure of each area to calculate the area of water bodies, and the calculation of the size of areas under water to carry water areas.
for aggregated data on the reporting form number 1A fish «Production aquaculture 20, the _____» (annual); d) after the annual calculations to analyze and evaluate the results obtained with the assistance of information from sources other similar data to compare calculations with preliminary data for the reporting year and the corresponding final figures for previous years. Key indicators of marketable fish are determined by formulas, including the volume of aquaculture production is determined by the formula 1.

\[ O_{na} = П_наг \times O_{тр} \]  

(1)

\( O_{na} \) – the amount of aquaculture production; \( П_наг \) – surface water; \( O_{тр} \) – production of marketable fish (in fattening ponds, cages, pools).

Fish productivity of 1 hectare reservoir determined by the formula 2:

\[ P_n = M_{тр} / П_наг \]  

(2)

\( P_n \) – fish productivity from 1 ha of pond; \( M_{тр} \) – weight of fish grown in a pond.

The total area of water bodies, fishery technological water bodies is taken from data from the State register of fishery water bodies (their parts). The area of water bodies (\( П_ваг \)) is determined as the sum of the total areas of the fishery technological water bodies (\( Птрваг \)) and water bodies (\( Пвоаг \)) by the formula (3):

\[ П_ваг = Птрваг + Пвоаг \]  

(3)

\( Птрваг \) – the total area of fishery ponds process; \( Пвоаг \) – total area of water bodies.

Amount the total area of water bodies define (\( Пвоаг \)) as the sum of squares was (\( П_в \)) and water bodies (\( Пво \)) by the formula (4):

\[ Пвоаг = П_с + Пво \]  

(4)

\( Пвоаг \) – the total area of water bodies; \( П_с \) – the area of the ponds; \( Пво \) – the area of water objects.

The difference of the squares of the fishery technological water bodies (\( Рптрв \)) is defined as the difference between the total area of a fishery technological water bodies (\( Птрваг \)) and area of fisheries of the technological ponds (\( Птрв \)) by the formula 5:

\[ Рптрв = Птрваг - Птрв \]  

(5)

\( Рптрв \) – the difference of the squares of the fisheries technological ponds; \( Птрваг \) – the total area of a fishery technological water bodies; \( Птрв \) – the area of the fishery technological water reservoirs.

3.4. The annual output marketable fish (\( O_{тр} \)) will be determined by the amount of fish caught in the fishery commodity technological waters (\( В_трв \)) and water bodies (\( В_во \)) by the formula 6:

\[ О_{тр} = В_трв + В_во \]  

(6)

\( О_{тр} \) – the amount of fish production (grow-out in ponds, cages, basins); \( В_трв \) – caught in a fishery technological water bodies; \( В_во \) – caught in water bodies.

3.5. The amount of production of planting material (\( О_{трм} \)) is determined by the amount of fish caught in the fishery commodity technical waters (\( В_трв \)) and water bodies (\( В_во \)) by the formula 7:

\[ О_{трм} = В_трв + В_во \]  

(7)

\( О_{трм} \) – the volume of production of planting stock in nursery ponds, cages, basins; \( В_трв \) – caught in the fisheries waters technical; \( В_во \) – caught in water bodies.
Accounting process of the fishery technological water bodies (fish ponds) is carried out according to the formula 8:

$$O_{р} = O_{3в} + (P_{прт} \times P_{рп}) + (P_{рв} \times P_{рп})$$

(8)

de, $O_{р}$ – production volume of marketable fish; $O_{3в}$ – production volume of marketable fish aquaculture submitted by entities in administrative reporting; $P_{прт}$ – difference technological water fisheries areas; $P_{рп}$ – calculation of the fish productivity in areas (intensive); $P_{рв}$ – the difference areas of water bodies; $P_{рп}$ – calculation of the fish productivity in regions (extensive).

It is helpful to consider the rules on fish productivity zones according to the Ministry of Agrarian Policy and Food of Ukraine of 30.01.2014 number 45 «On approval of zones aquaculture (fish farming) and fish productivity in the regions of Ukraine» carefully.

Conclusions. Thus, we have every reason to draw the following conclusions and choose the direction for further research development and functioning of aquaculture production in Ukraine. However, during the calculation of the production of marketable fish should be used to run the following approaches: the absence or lack of data for some indicators or territories (areas) for adjustment of parameters to improve the calculation. Use the following additional sources of information: data specified sampling grouped by region or as a whole; information on the average values of the previous years, but not less than 3 years; use performance ratio and rate of changes of similar indicators in fish farms is dynamics.

References