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**INNOVATIVE RESEARCH IN THE AGRICULTURAL SECTOR  
OF UKRAINE AND EU COUNTRIES**

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**THE CURRENT STATE OF EXTRACTING AQUATIC  
BIORESOURCES IN UKRAINE**

**СУЧАСНИЙ СТАН ВИДОБУВАННЯ  
ВОДНИХ БІОРЕСУРСІВ В УКРАЇНІ**

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Fishing has traditionally played an important role in ensuring food security in many countries of the world and for supporting the population employment and well-being, while fishing itself forms a fairly significant share of cash receipts and income, including taxes and fees [1].

In recent years, in connection with a significant decrease in the fish stocks in the world ocean, and, accordingly, in the volume of its catching, the development of various forms of aquaculture is becoming more and more widespread. Fishing is one of the few branches of the domestic economy, which ensures not only the food security of the state, but also allows to diversify agrobusiness and to increase the profitability of its management with relatively small initial investments and a guaranteed sales market.

Unlike animal husbandry, fishing industry, due to its specificity, could quickly and significantly increase the country's food resources as a result of the increase in the number and improvement of the material and technical base of the fishing fleet. But, today, the extraction of aquatic bioresources is constantly decreasing and there are many favorable reasons for this, primarily related to the annexation of the Crimean Peninsula by the Russian Federation, as well as the temporary occupation of the certain territories of Ukraine. In addition, the factors that led to decreasing the volume of extracting the aquatic bioresources are insufficient stocking of reservoirs; the inadequate state of the stocks of the main commercial fish species in the Azov-Black Sea basin; the insufficient number of fishing vessels, their unsatisfactory technical conditions, etc. Significant decreasing the volumes of catching the aquatic bioresources in the inland reservoirs and the Azov and Black seas negatively affects the economic potential and the international dependence of the country on fish imports, and most importantly, it does not contribute to providing the domestic market of Ukraine with the important protein products [2–4].

According to the data of the State Statistics Committee of Ukraine [5], in 2021 only 69.9 thousand tons of aquatic bioresources were obtained, and almost 33% of them were from the internal reservoirs (Table 1).

The fish catch volume in the inland water bodies decreased by 2.6% compared to 2020. In particular, in 2021, 41.8 thousand tons of fish and 28.1 thousand tons of other water resources were caught, and 22.7 thousand tons of fish and 0.057 thousand tons of other water resources were caught in the inland water bodies.

With a loss of a part of the marine fishing fleet in 2013, fishing in the economic zones of other states decreased by almost 80% [1].

In the structure of extracting the aquatic bioresources for 2021, it should be noted that 60% is fish, the rest is crustaceans and molluscs and other aquatic bioresources. More than 50% of the extracted water bioresources total volume is in two regions – the Mykolaiv region and the Odesa region. Fishing is the least developed in the western and northern regions, where there are no suitable natural conditions for accessing to the large water bodies (seas, large rivers, reservoirs, lakes), which are in the southern and central regions (Fig. 1).

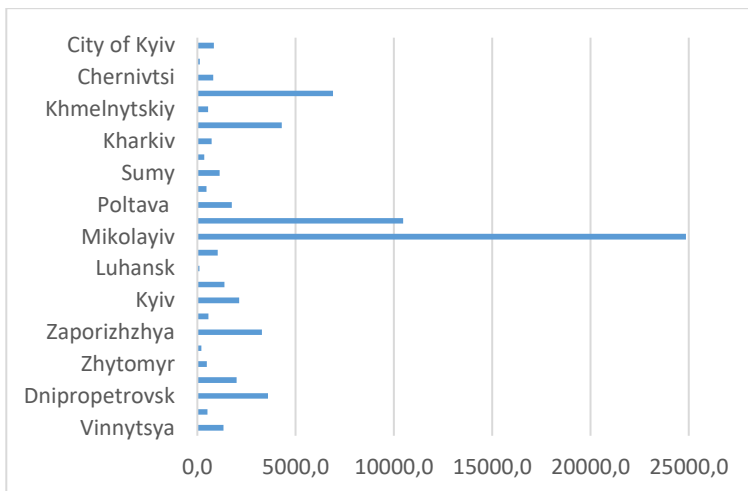
Table 1

**The extraction of aquatic bioresources in the major fishing areas in 2021 [5]**

	Volume of extracted aquatic bioresources, tonnes		Average price of extracted aquatic bioresources, UAH per 1 tonne	
	2021	2021 у % до / % to 2020	2021	2021 у % до / % to 2020
Aquatic bioresources				
<b>All fishing areas</b>	<b>69872,9</b>	<b>91,3</b>	<b>15760,1</b>	<b>101,0</b>
Aquaculture	11100,7	93,0	41076,5	114,2
Inland waters objects	22663,0	97,3	15217,8	102,1
Azov Sea	к/с	к/с	к/с	к/с
Black Sea	9971,4	82,8	7802,0	101,0
Atlantic, Antarctic	к/с	к/с	к/с	к/с
Fish				
<b>All fishing areas</b>	<b>41816,1</b>	<b>86,7</b>	<b>20922,2</b>	<b>104,9</b>
Aquaculture	11097,3	93,1	40829,9	114,3
Inland waters objects	22606,4	97,4	15154,5	101,7
Azov Sea	к/с	к/с	к/с	к/с
Black Sea	4165,9	89,7	10429,4	108,6
Atlantic, Antarctic	к/с	к/с	к/с	к/с
Other aquatic bioresources				
<b>All fishing areas</b>	<b>28056,8</b>	<b>99,2</b>	<b>8066,6</b>	<b>98,6</b>
Aquaculture	3,4	48,8	852051,6	179,3
Inland waters objects	56,6	67,9	40535,0	239,8
Azov Sea	к/с	к/с	к/с	к/с
Black Sea	5805,5	78,5	5916,7	90,4
Atlantic, Antarctic	к/с	к/с	к/с	к/с

1 Data exclude the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of temporarily occupied territories in the Donetsk and Luhansk regions.

Symbol (c) – data are not published in order to ensure compliance with the requirements of the Law of Ukraine "On the State Statistics" regarding confidentiality of statistical information.



**Fig. 1. The extraction of the aquatic bioresources by species and regions (According to the State Statistical Service of Ukraine [5])**

In Ukraine, the share of catching freshwater and marine fish in 2021 was 80% and 20%, respectively. After considering, in a section, the production of the aquatic bioresources by fishing areas, it can be seen that aquaculture accounts for 11.1 thousand tons, the extraction in the inland water bodies accounts for 22.7 thousand tons, the Black Sea area accounts for 9.97 thousand tons, other data are not made public in order to ensure the compliance with the requirements of the Law of Ukraine "On State Statistics" regarding the statistical information confidentiality. The Odesa, Cherkasy, and Dnipropetrovsk regions accounted for the largest catch share in the internal facilities and amounted to 4.7 thousand tons, 4.1 thousand tons, and 3.3 thousand tons in 2021, respectively, but the largest catch share in aquaculture is only in the Cherkasy region and amounted to 2.8 thousand tons [5–8].

The fishing industry of Ukraine is in a state of crisis. From 2011 to 2021, the volume of the fish catch decreased by 32% and gradually decreases every year. Domestic aquaculture provides only 20% of the domestic consumer needs for fish.

Ensuring an increase in the fish farming and fishing volume should be based on implementing a comprehensive state program for the development of aquaculture with the involvement of all available water, material and technical and raw resources.

The development of aquaculture in Ukraine requires an increasing consumer demand for freshwater fish species, and the cultivation of which is



the main base for the untapped potential of fishing in the inland water bodies, and the implementation of a set of measures to restore the resource and production potential of the fishing industry. In particular, it should be noted the expediency of creating a favorable economic environment for attracting the investments into the implementation of the latest resource-saving technologies for the intensive pond, cage, river and basin fish farming.

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