

FISH AND SEAFOOD MARKET RESEARCH IN UKRAINE

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A systematic analysis of the volumes of fish and seafood production in Ukraine and European countries is conducted, the issue of the ratio of import and export of fishery products in Ukraine is highlighted. It is shown that the fish and seafood market of Ukraine is far from being saturated, but also even from the minimum satisfaction of the domestic needs of the country's population. The average annual consumption of fish and seafood in Ukraine is much lower than the world average. The main supply of fishery products in the domestic market is provided by imported supplies, which is about 75% of domestic consumption. The expediency of using the European experience, in particular regarding the use of the principles of the Common Fisheries Policy, is outlined.

Keywords: fish; seafood; export; import; market of fish

Introduction

Fish and fishery products play an important role in food and nutritional security around the world. Consumption of fish offers unique nutritional and health benefits and is considered a key element in a healthy diet. Increased attention is given to fish as a source of essential nutrients in our diets, not only high value proteins, but more importantly also as a unique source of micronutrients and long chain omega-3 fatty acids.

Fish consumption is also known to have health benefits among the adult population. Strong evidence underlines how consumption of fish, and in particular oily fish, lowers the risk of Coronary Heart Disease (CHD) mortality; it is estimated that fish consumption reduces the risk of dying of coronary heart diseases by up to 36 percent due to the long-chain omega-3 fatty acids found in fish and fishery products.

Wild and farmed fish are a healthy and better alternative to almost any other meats (FAO, 2019).

Therefore, in recent years, there has been an annual increase in the volume of world production of aquatic living resources and an average annual indicator of world consumption of fish and seafood.

The prospects for the development of the domestic fish market and fish products are devoted to the work of many scientists. The overwhelming majority of these works deal with the general trends in the development of the fish and fish market, the state of export-import operations, and (to some extent) the issue of the price of production. In addition to these features, in our opinion, quite important issues are the adaptation of the industry to the conditions of globalization.

Material and methods

The theoretical and methodological basis of the study is a systematic approach to the study of economic and organizational aspects of the development of fisheries and scientific works of domestic and foreign scientists on the functioning of the fish and seafood market.

Materials of the State Statistics Committee of Ukraine and Eurostat, researches of the authors were the information base of the research.

In the course of the research, general scientific and economic methods were used: the monographic method (in formulating the problem and determining conclusions); calculation and constructive method (in justifying the dynamics of supply and forecasting the main economic

indicators of the development of the internal market of fish and seafood; in determining the volume of exports and imports).

Results and discussion

An analysis of the results of the research on the status and prospects of the fish and seafood market shows the significant changes that have taken place over the last decades. Seafood from the category of delicacies gradually turned into the category of frequently consumed products.

Fish catch and consumption are increasing worldwide. So in recent years, the world average annual consumption of fish per person is more than 20 kg and is growing annually. However, in

Table 1 World Fish Market at World fish market at glance (million tonnes)

	Year			Change: 2018 over 2017 (%)
	2016	2017	2018	
Production	170.9	175.1	178.8	2.1
Capture fisheries	90.9	91.5	91.8	0.3
Aquaculture	80.0	83.6	87.0	4.0
Trade volume(live weight)	59.5	60.5	60.8	0.5
Total utilization	170.9	175.1	178.8	2.1
Food	151.2	154.4	157.9	2.2
Feed	14.6	15.6	15.8	1.3
Other uses	5.1	5.1	5.1	0.0
Per caput food consumption				
Food fish (kg/year)	20.3	20.4	20.7	1.1
From capture fisheries (kg/year)	9.5	9.4	9.3	-1.0
From aquaculture (kg/year)	10.7	11.1	11.4	2.9

Source: proposed by authors according to data of <http://www.fao.org/in-action/globefish/fishery-information/world-fish-market/en/>

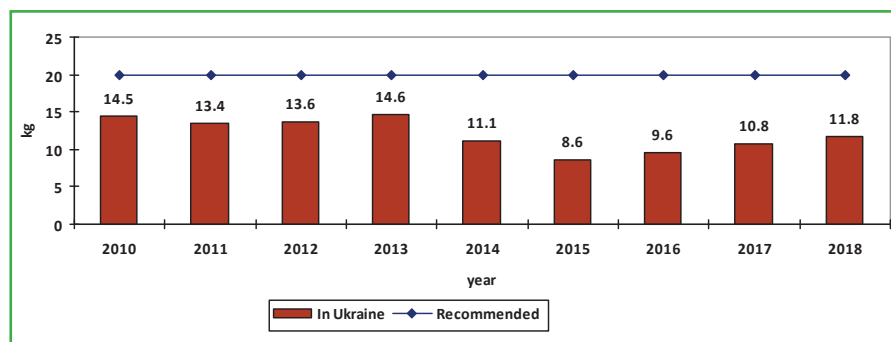


Figure 1 Per capita food consumption in Ukraine in period 2010–2018

Source: proposed according to data of <http://www.ukrstat.gov.ua>

developed countries, this figure may be 2–3 times higher.

The fish and seafood market of Ukraine is far from not just being saturated, but even from the minimum satisfaction of the domestic needs of the country's population. The average annual consumption of fish and seafood in Ukraine is much lower than the world average (Figure 1).

The resources of inland water bodies and the exclusively maritime economic zone of Ukraine can now supply up to 86,000 tonnes of fish and seafood. For a long time, fish has been the main source of aquatic living resources, from 98% in 2010 to 88% in the following years. Only in 2018 the share of fish in total catch decreased to 75%.

Ukraine's fisheries are in a state of disrepair: the deterioration of the national fishing fleet, outdated material facilities, imperfect technologies, the irrational use of existing production facilities and the lack of investment in the sector cannot properly ensure its functioning.

In addition, the significant decline in fish production since 2014 in the territory of Ukraine is caused by annexation of Crimea, which provided almost two-thirds of biological resources to the domestic market.

In 2018, the catch of fish and seafood in Ukraine was low compared to European countries. According to Eurostat, among the European countries, the largest fish and seafood production in 2018 was in Norway, followed by Denmark, the United Kingdom, the Netherlands, Turkey, Germany, Sweden, Poland and Finland.

As can be seen from Figure 2, Ukraine ranks 10th among European countries in terms of fish and seafood catch.

In the coming years, the situation with the filling of the domestic market by fishery products of Ukrainian production should not be expected to improve significantly, as this process is long-lasting and requires considerable investment resources.

The development of the fishing industry in Ukraine is also hampered by numerous bureaucratic obstacles, namely the lack of a single land/pond lease tariff; the opacity and bias of fishing quotas; illegal, unreported, uncontrolled fishing and lack of support from the fisheries sector by government entities. Because of these problems, fishing in Ukraine is not accounted for 100%, and many of the fish harvested are in the shadow (Agronews, 2017).

It is appropriate to take into account European experience, in particular on the application of the Common Fisheries Policy (CFP).

Table 2 Volumes of fish and seafood catch in Ukraine for 2010–2018 (tonnes)

Year	Catching of fish and seafood			Including fishing
	total	including		
		in inland reservoirs	other fishing regions	
2010	218,681	38,364	180,317	215,017
2011	211,182	37,574	173,608	205,285
2012	203,926	41,569	162,357	195,490
2013	225,802	45,695	180,107	216,354
2014	91,252	39,612	51,640	80,958
2015	88,552	38,507	50,045	73,963
2016	88,443	40,754	47,689	78,490
2017	92,645	42,176	50,469	81,875
2018	86,222	46,820	39,402	64,738

Source: proposed according to data of <http://www.ukrstat.gov.ua>

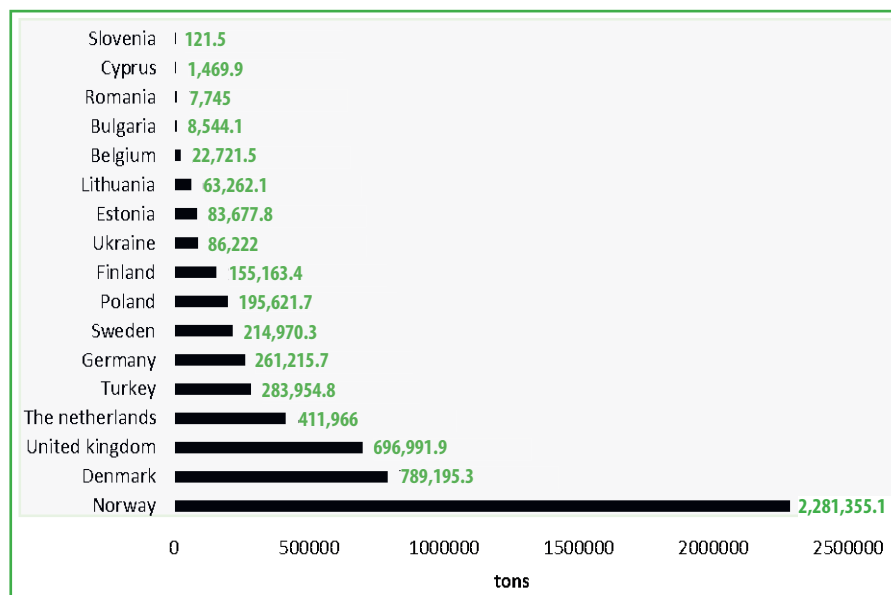


Figure 2 Catch of fish and seafood in some European countries in 2018

Source: proposed by authors according to data of <https://ec.europa.eu/eurostat/databrowser/view/tag00076/default/table?lang=en>

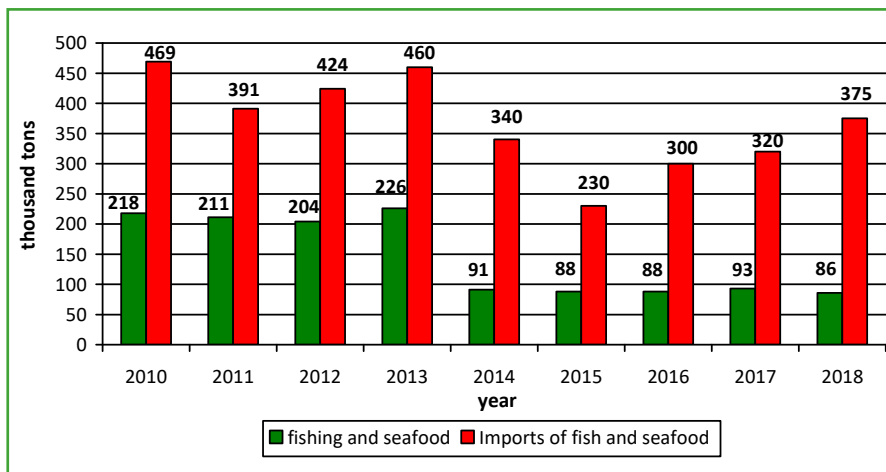


Figure 3 Volume of production and import of fish and seafood in Ukraine for 2010–2018 (thousands tonnes)

Source: proposed according to data of <http://www.ukrstat.gov.ua>

The CFP is a set of rules for managing European fishing fleets and for conserving fish stocks. Designed to manage a common resource, it gives all European fishing fleets equal access to EU waters and fishing grounds and allows fishermen to compete fairly.

Stocks may be renewable, but they are finite. Some of these fishing stocks, however, are being overfished. As a result, EU countries have taken action to ensure the European fishing industry is sustainable and does not threaten the fish population size and productivity over the long term.

The CFP was first introduced in the 1970s and went through successive updates, the most recently on 1 January 2014 (European Commission, 2019).

At the same time, considering the trends in increasing fish production in the world,

the relative stability of world prices and the projections for a gradual increase in income of Ukrainians, we can expect an increase in fish imports (Economic discussion club, 2019).

The main supply of fishery products in the domestic market is provided by imported supplies, which is about 75% of domestic consumption.

The stability of the national currency during 2018, a slight increase in household incomes, as well as an increase in supporters of healthy food and lovers of sea gifts, ensured an increase in imports by 16% in quantitative terms and by 20.5% in monetary terms compared to 2017.

Fish and seafood imported increased to 375 thousand tonnes in 2018 (against 323 thousand tonnes in 2017). In terms of money, fishery products were imported for \$ 630 million (against \$ 522 million in 2017).

In 2018, 56% of imports were frozen fish (290 thousand tonnes worth USD 351,567 thousand). Imports of fresh and chilled fish accounted for 17% (15,000 tonnes worth USD 10,735,300) of total fish and seafood imports. Imports of prepared and preserved fish and caviar amounted to 8.6% (24 thousand tonnes at USD 53,832 thousand), fish fillets – 7% (25 thousand tonnes at USD 44,252 thousand). Everything else is crustaceans, molluscs and aquatic invertebrates.

In 2018, Ukraine imported fish and seafood from 65 countries. 62% of total imports accounted for the five largest fish exporters to Ukraine. In the first place is Norway with a share of 26%. Next – Iceland with a share of 15%. Then – the USA (10%), Canada (6%), China (5%).

At the same time, in 2018, Ukraine exported fish and seafood in the amount of 10,500 tonnes for a total amount of \$ 37 million (against \$ 34 million in 2017). Fish fillets were the most exported – 3 thousand tonnes for USD 17,333 thousand, which made 47% of the total export of fish and seafood. Canned fish and caviar finished second in export with 25%. Exports of other fish for food (including dried, salted, smoked fish and fish meal) accounted for 10%, crustaceans, shellfish and other aquatic invertebrates, prepared or preserved, represented 8%.

Exports were made to 65 countries. The largest share of fish and seafood was exported to Denmark (16%), followed by Germany (15%), France (14%), Moldova (11%) and Turkey (9%).

In Ukraine, 250 companies are engaged in the import of fishery products. At the same time, the share of 10 companies accounts for 60% of all imports (Booth, 2017).

Table 3 Exports and imports of fish and seafood in Ukraine in 2018 by type (thousands \$)

Type of fish products	Export		Import	
	kg	thousand \$	kg	thousand \$
Live fish	383,262.7	468.0	4,667.0	265.1
Fish fresh or chilled	65,430.3	282.2	15,414,243.5	107,352.9
Frozen fish	667,658.6	1,522.7	290,597,420.6	351,567.3
Fish fillets and other fish meat	2,721,759.5	17,333.1	24,636,570.0	44,251.9
Other fish for food	467,450.6	3,678.2	5,748,839.1	7,708.6
Shellfish	13,620.9	103.0	4,847,337.0	27,045.2
Clams	567,705.6	1,592.6	3,174,744.8	11,304.9
Water invertebrates	275.0	1.7	359.5	38.8
Ready or canned fish, caviar	4,928,520.0	9,086.0	23,777,232.7	53,832.2
Prepared or preserved crustaceans, molluscs and the like	698,004.9	3,004.4	7,197,648.9	25,879.8
Total	10,513,688.2	37,071.9	375,399,063.0	629,246.7

Source: proposed according to data of <http://www.ukrstat.gov.ua>

Conclusion

The analysis of the results of the study of the status and prospects of the fish and seafood market showed an increase in their consumption. In Ukraine, consumption of this type of product is much lower than the recommended standards. In 2018, this figure was 11.8 kg.

In the coming years, the situation with the filling of the domestic market by fishery products of Ukrainian production should not be expected to improve significantly, as this process is long-lasting and requires considerable investment resources. The reasons for this are the deterioration of the national fishing fleet, outdated material and technical facilities, imperfect technologies, the irrational use of existing production facilities. On the other hand, its underdevelopment (compared to, for example, animal husbandry or even the agro-industrial complex) makes fisheries attractive enough to invest in the medium and long term.

Considering the trends in the increase of fish production in the world, the relative stability of world prices and the forecasts for the gradual increase of incomes of Ukrainians, it is possible to expect an increase in the volume of fish imports.

Ukrainian companies-importers, in addition to the sale of fishery products in Ukraine, carry out the processing of products at modern certified enterprises and export already processed fishery products, which is one of the promising areas of development of the industry.

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