УДК 339:637’8

Elena Derenko

Postgraduate, NSC «Institute of agrarian economy»
street Heroes of Defense, 10, Kyiv, 03680
elenashkidchenko@ukr.net

UKRAINIAN TRADING WITH FISH AND AQUACULTURE PRODUCTS

Abstract. The influence of the fish policy on food providing are analyzed. The dynamics of aquaculture production and fisheries in the market are analyzed. Fish consumption and market demand are considered. Fish and fish products market is developing dynamically today, which is encouraged by the increased supply of products and gradual increase in products range. Importance of fisheries for local and global food systems is proved. The research of realization of fish and fish products on Ukrainian domestic market are presented. The measures of improving the regulation of the market of fishery products and aquaculture are developed.

Keywords: *fisheries, aquaculture, government regulation, demand, supply, fish products.*

Introduction. Global food problems induce humanity to create conditions of guarantee access to quality food in the optimal quantity. The fish production has important role for animal production segments with all infrastructure, processing, storage and marketing of fish products. Ukraine organizes the market of fish products and aims to harmonize supply and demand for the benefit of both producers and consumers. Even though fish is not a major product for Ukrainians, still it is of significant importance in their nutrition. Today consumers get fish and fish products mostly through intermediaries. It has negative effect on the quality of fish and fish products, because of the lack of appropriate conditions for fish storage. During the resale the properties of fish and fish products are worsening. Supply of fish to the domestic market from own production and the catch is 20 %, and imports – 80 %. Currently, there is no mechanism for realization of fish and fish products on Ukrainian domestic market. Functioning of the fish market in Ukraine has been based on the budget funding.

When the budget has exhausted, the government tried to drastically reorient a mechanism to self-regulating.

Analysis of recent researches and publications. The analyze of fish and seafood products markets are in the focus of many leading scientists and economists: M. Halwart, D. Soto, J. Arthur [1], I. Tsukrov, M. Ozbay, D. Fredriksson, M. Swift, K. Baldwin, B. Celikkol [2], Y. Sharylo, K.O. Ribalchenko [4], Shepelev [3; 6], F. Asche, B.Belton, S. Thilsted [8], Cochrane, K. Bianchi, G. Willmann, R. Majkowski, J. Tandstad, M. Carocci [9], T. Pitcher [10] and many others authors.

Previously unsettled problem constituent. A significant level of fish imports to Ukraine now motivates scientists to the study of problematic issues of organization and functioning Ukrainian domestic market and trade on it.

Main purpose of the article. Market fish and fish products are dependent on imports. This situation now gives us every reason to recognize the urgency of this problem and find ways to address it in the future.

Results and discussions. In 2015 a total of 8 600 tons of fish, crustaceans, fish products and other aquatic invertebrates were exported from Ukraine in a total 17,7 million USD. This is 31 000 tones less compared to 2014 year when it was 39 600 tons and 42 800 tons less compared to 2013 when the export was 51 400 tons. Wholesale and retail fish sales depend on the consumer demand, which increases due to transition from consumption of expensive meat to the cheaper and healthy fish. Though the level of fish consumption in Ukraine has not reached the level of 1990 yet, it has increased significantly compared to 1992-1995 years. The average annual rate of fish and fish products consumption justified by the National Institute of Nutrition (NIN) under the Ministry of Health of Ukraine is 20 kg per person.

The increase in consumption of fish and seafood was caused by the epizootics, particularly epidemics of chicken and swine flu. Increasing demand for fish might also be caused by popularization of a healthy diet. The share of fish and fish products, according to statistics from 1995 to 2015 has increased four times from 0,13 % to 0,55 %. It indicates the rising of importance of fish in nutrition of Ukrainians. When consumption of fish and fish products by Ukrainians accounts to nearly 17 kg per person annually, the share of meat products exceeds 45 kg per person per year, and the one of dairy products exceeds 225 kg per person per year. Since 1990 the consumption of fish and fish products in Ukraine has ranged and decreased from 17,5 kg in 1990 to 8,4 kg in 2000 and has increased to 14.9 kg in 2009. The lowest indicator was in 1994 amounting to 3.5 kg per person. The fish industry had to provide 922,8 ths. tons of fish products in 2009 in Ukraine with population of 46.1 million people but the indicator was only 211,2 ths. tons, which is 4.4 times less than required. There are new fluctuations of fish and fish products on Ukrainian market in the last few years. Since 2010 there is a new decrease in consumption of fish and fish products (to 14, 5 kg annually per person, and in 2015 to 9,9 kg annually per person according to the data of the State Statistics Service of Ukraine. The purchasing power of population was very low in 2015. The share of consumers buying frozen fish, filleted and other fish meat (including minced), fresh and chilled fish to save money have increased. Due to currency fluctuations and falling of population's solvency fish sales have slowed down by 50 %. Though fish products are important, their share in the nutrition and in the family budget expenses are low and demand for such products is directly influenced by market prices. Ukrainians consume mostly fresh and frozen domestic fish that is not processed. The following fish is in demand: frozen fish (merluccius, theragra, micromesistius, tilapia); smoked fish (bream, clupea harengus membras, capelin); fresh fish (common carp, crucian carp, atlantic salmon); canned fish; seafood (squid, octopus); dried fish (esox, gobies); caviar and caviar substitutes. Also a demand has sprat, esox, so-iuy mullet. The common carp, bighead carp, grass carp have the biggest demand among the population among all the species of aquaculture products. The leaders among the fluvial fish are: cyprinus carpio (10,6 %), bighead carp, grass carp (13,6 %) and prussian carp (5,1 %). The increase of the consumption of freshwater fish was observed in 2014. Among these species there were: wels catfish – 75%, zander – 36 %, common carp – 11 %, bighead carp, grass carp – 14 %, bream – 8 %, prussian carp – 22 %. The most popular sea-fish in consumption, caught in Ukraine in 2015, was anchovy, so-iuy mullet – 15,5 % from the total consumption of fish; gobies – for 13,3 %, clupeonella – 8,4 %, krill – 10,1 %. There is a direct relation between the fish consumption with the density of urban population in any region of Ukraine nowadays. Thus, the indicator ranges from 15 kg per person a year to more than 17 kg per person a year in the following regions: Donetsk region (share of urban population is 90,4 %), Zaporizhzhya region (76,6 %), and Mykolaiv region (67,5 %). Contrastingly, the other regions of Ukraine consume from 8,8 kg per person a year to 11,6 kg per person a year in such regions as Zakarpattya region (share of urban population is 37,1 %), Ivano-Frankivsk region (42,9 %), Rivne region (47,5 %), Ternopil region (43,2 %). The exception is Kiev region, where the share of urban population is 60,4 %, whereas the fish and fish products consumption is nearly 19,5 kg. The consumption of fish and fish products in the Kiev region has reached the desired physiological rates of consumption per person, which is due to higher incomes and better supply of fish products.

The nutrition of rural settlers is more varied, high-energy, has more fish protein compared to the urban dwellers, who consume more fresh fish, frozen fish, chilled fish, while in a rural settler's nutrition dried fish, salted or smoked fish prevails, which is associated with the traditions of their food. The consumption of canned fish and premade fish products is higher in the cities than in rural areas because of the rapidity and ease of preparation. The share of sea fish is more for urban residents, consisting of 28 % against 15 % for the rural settlers. Shrimps are consumed by nearly 4 % population of rural areas and by 1 % – in the cities. Consumption rates of laminaria are higher in the rural areas (3 %). Crab sticks' consumption is almost the same for both

Закінчення таблиці 1

groups. Calamary, mytilus galloprovincialis and premade fish products are consumed only in cities, but their share is insignificant – 1 % for each species.

The majority of consumers prefer (by types of fish): fresh fish – 60 %, then frozen fish – 13 %, smoked fish – 12 %, salted fish – 8 %, canned fish and fish preserves – 3 %, fish jerky – 2 %. The frozen fish are consumed by 19 % of the population, smoked fish – 18 %, salted fish – 16 %, canned fish – 8 %, fish jerky – 7 %, fish preserves – 4 %. The difference in consumption between the population living in the cities and villages is applicable only to frozen fish (the share of consumption of frozen fish in the cities is 23 %; in rural areas – 11 %) and smoked fish (24 % and 15 % respectively). The difference for other types of fish products is 1–2 %. Fish and seafood are often bought in specialized stores – 30 %; at the market – 29 % (in particular it's applies to fluvial fish); at the supermarkets – 15 %; retail sales – 6 %; wholesale sales – 4 %; in pop-up markets – 3 %. Nearly 13 % of population prefers the self-caught fluvial fish. To determine the frequency of consumption of different types of fish and seafood the following main types of fish have been selected: fresh fish, frozen fish, smoked fish, salted fish, jerky fish, canned fish, fish preserves, frozen seafood, seafood, crab sticks, laminaria. Among people who prefer fresh fish, 58 % consume it several times a month; 18 % – several times a week, 14 % – several times a year, 6 % – on holidays and 4 % – every day. Frozen fish is consumed several times a month by 54 % of respondents, 30 % – several times a year, 18 % – on holidays, 15% – several times a week, 1 % – every day. Smoked fish is bought a couple of times in a month by 44 % of respondents, 39 % – several times a year, 29 % – on holidays, 19% several times a week and 2 % – every day. Salted fish is eaten daily by 4 % of consumers; several times a week – 18 %, several times a month – 46 %, several times a year – 33 %; on holidays – 9 %. Frequency of fish jerky, canned fish, fish preserves and seafood consumption is almost the same within each product group: daily consume 1–4 % of the population, several times a week – 13–14 %, several times a month – 36–40 % several times a year – 44–47 %, on holidays – 11–19 %. Percentage of consumers who buy preserves and seafood on holidays is the highest among these products – amounts to 18 % and 19 % respectively, since the preserves do not require additional efforts from consumers, they are very convenient as a festive meal and as fish snacks often bought with beer. Frozen seafood, which includes crustaceans and frozen premade fish products, is daily consumed by 4 % of the population, several times a week – 18 %, several times a month – 62 %, several times a year – 16 %, on holidays – 5 %. A peculiarity of this product group is due to the fact that the half-finished fish products are the supplement for daily family menu; frozen crustaceans are often bought for beer. Crab sticks is a product that has appeared on the Ukrainian market more than 10 years ago and has gained the wide popularity among consumers as a supplement for a festive table and as a product that has replaced fish and seafood in the nutrition of consumers. It explains the high share of customers which buy crab sticks on holidays – 31 %. Crab sticks are daily consumed by 3% of the population, several times a week – 22 % several times a month – 30 %, several times a year – 45 %. Laminaria is daily consumed by 6 % of consumers, several times a week – 21 %, several times a month – 50 %, several times a year – 23 % on holidays – 47 %. Ukrainian regional leaders in the consumption of fish are: Odessa region – 18,6 kg per person a year and Cherkasy region – 19,2 kg per person a year. The reason of leadership of the Cherkasy region is based on its location on the Kremenchuk storage reservoir, at the Dnipro River, the Ross River and the Sula River. The prices of fish and fish products play an important part in consumption by administrative regions of Ukraine. The prices for fish and fishery commodities have increased by more than 50 % in Ukraine in 2015. The prices of fish and fishery commodities have increased by 52,6 % according to The State Statistics Service of Ukraine in the distribution network (excluding urban markets) during 2015. In general, the increase of prices happened with sea products (186 %), canned fish in oil (176,7 %) and clupea (152,3 %). According to the State Agency of Fisheries of Ukraine an average price for fish and fish products in urban markets has increased by 55,5 %. The domestic fresh fish is the only product of mass consumption now. There is no need to have the certificate of origin for realization. The current fish market is characterized by: increased imbalance between demand and supply of fish products; misbalance between the products quality and consumers' demands; accelerated growth of retail prices for fish and fish products under conditions with the lowering of their quality. Ukrainian market of fish and fish products depends on the next factors: stability of the national currency; government policy on attitude to importers and exporters; inflation rates; increase of the minimum wage. There are two versions of presence at market of the Ukrainian companies: suppliers bring the fish directly to the store themselves. It's a good solution for cities, but it isn't suitable for small towns. Mediators do not want to go for small orders; b) individual purchases at wholesale depots. Frozen fish come in boxes, so it is not difficult to take it to the store. There are several wholesale markets of fish and fish products in Ukraine, such as «Stolychnyi» in Kyiv, «Shuvar» in Lviv, and «Hospodar» in Donetsk. Sector «Fish and Meat» it «Stolychnyi» market in Kyiv includes 6 pools for live fish; freezers capacity of 1224 mi, the number of trading places – 108 mI – 8,72 mI – 18.54 mI – 2.36 mI – 8. Domestic fish producers have an opportunity to purchase a block of bonds at the «Fish and Meat» sector that which is 10 bonds to 1 m^2 area (10 000 UAN/mI). Fisheries enterprises that are working in aquaculture and do not have bonds in possession are able to rent a space for up to one year, followed by filling of vacant space based on competition. Rent can be reviewed after the expiry of the lease in this case. There is a small number of specialized shops for fish and fish products. The research of assortment of fish products on the example of supermarkets «Dary moria» and «NOVUS» has revealed the following: the dominant fish species are marine species of fish and seafood. Among the products ready for consumption, preserves are represented by marine species only. The level of dependence of the food market from import of fish and fish products is rapidly increasing. Fish production, including canned fish, was carried out by more than 150 companies in 2015 in Ukraine. The total assortment is around 3 thousand items. According to the statistics, 59,3 ths. tons of fish products, of which 55 % are canned fish, were produced in 2015 mainly from imported frozen fish or filleted fish and other fish meat (including minced). The amount of fish products amounted to 35,9 ths. tons in 2014, showed a decline in production of fish products by 22 %.

Production from Ukrainian fish mainly consists of the dried fish, fish jerky, smoked fish (marine fish: gobies, sprat, anchovy, sprattus; inland fish: bream, rutilus, Scardinius). Production of fish products in Ukraine in 2015 compared to 2013 has decreased almost 60 %. It's connect with an annexation of the Crimea, where the large fish processing enterprises were located such as LLC «Sevastopolkyy», LLC «Noviy», LLC «Proliv», LLC «Vostok», JSC «Trading House «Favorit». And the main power of the production of fish products were locate at the Crimea historicall.

The decrease in fish products production was affected by the Russian import ban on canned fish on 29th of July, 2014, which accounted for 80% (28.3 ths. tons) of total Ukrainian exports of prepared or canned fish and fish products in 2013. Ukraine exported only 3.2 ths. tons of prepared or tinned fish in 2015 while this indicator was almost 35 ths. tons in 2013. Currently Ukrainian producers are engaged in capacity building in the mainland part of Ukraine and the progressive reorientation on the markets of the European Union, Asia and other countries.

By 2015 annual imports of fish and seafood to Ukrainian market showed a tendency for growth, in particular, regarding fresh fish, chilled fish, frozen fish and some of its kinds in processed form – excluding filleted and fish meat, prepared or tinned fish; black caviar and its substitutes that are produced from other fish eggs.

The decrease observed in certain product subgroups – live fish, dried fish, smoked fish, crustaceans. In 2015, the falling purchasing power of Ukrainians led to a significant decrease of fish and fish products imports. In 2015 Ukraine imported 230,2 ths. tons of fish, fish products and other aquatic invertebrates totaling 326,2 million dollars USA, that which is 35 % less than in 2014 (348,4 ths. tons in the amount of 685,3 million dollars USA), and 50 % less than in 2013 (469,5 ths. tons in the amount of 988,9 million dollars USA). The prices on imported fish products increased: sardinella and sardine (186 %), pink salmon (178 %), clupea (170 %). Prices for domestic fish (common carp, carassius, Far Eastern carps, bream, so-iuy mullet) have grown by 40–50 %. The main reason for this increase is the economic situation and devaluation of Ukrainian hryvnia. The following imported

Проблеми інноваційно-інвестиційного розвитку. — 2017. — № 12

frozen fish is a traditional product for the population of Ukraine: clupea, merluccius, scomber, sardine, sprat, sprattus. In 2015 181,5 ths. tons of frozen fish, fish fillets were imported to Ukraine, which is 85 % of the total imports of fish and other aquatic invertebrates and finished products. Also caviar and its substitutes import amounted to 15,5 ths. tons of worth 0,2 billion of USA dollars; the import of fish, fresh or chilled, except for the filleted and other fish meat – 10,7 ths. tons of worth about 0,5 billion of USA dollars, fish fillets and other fish meat (including minced), fresh, chilled or frozen 13,1 ths. tons of worth 0.3 billion of USA dollars were imported in 2015. The frozen fish was the most imported product in 2013 – 329,8 ths. tons, fish fillets and other fish meat (including minced), fresh, chilled or frozen – 48,6 ths. tons, canned fish, including caviar and its substitutes produced from caviar of other fish – 40,4 ths. tons, and chilled fish, fresh fish – 23,3 ths. tons worth nearly 0,9 billion dollars USA. The structure of commodity circulation in fish and seafood imports to Ukraine in 2013 was dominated by frozen fish (58,9 %), chilled fish, fresh fish (15,6 %) and fish fillets and other fish meat (including minced), fresh, chilled or frozen (10,4 %), prepared or tinned fish, caviar and its substitutes that are produced from caviar of other fish (9,7 %). These segments together held 94,6 % of the whole fish.

The structure of the commodity circulation in fish and seafood imports to Ukraine in 2015 was dominated by frozen fish (86,3 %), chilled fish, fresh fish (0,5 %) fish fillets and other fish meat (including minced), fresh, chilled or frozen (6,2 %), prepared or tinned fish, caviar and its substitutes produced from caviar of other fish (6,3 %). These segments together held 99,3 % of total fish market. According to the fig. 2 and table 1, import of frozen fish has reduced by 48,64 % in 2015. Imports of some fish species, by contrast, have grown – it is sprat, above all. Import of clupea, scomber, capelin has also increased. Amount of clupea imports was 7 ths. tons, scomber – 95 ths. tons, capelin – 1 ths. tons. Though Ukraine does not import pike perch. 82 % of consumed fish in Ukraine was imported at 2014.

More than 90 % of fish imported in 2015 are accounted for fish, which Ukraine does not have access to and which is extracted from waters of exclusively maritime economic zones of other states. Ukraine does not have the resource base of clupea, scomber, halibut, atlantic salmon and many other types of fish which the buyers are looking for. Fish and seafood have been imported from more than 15 countries in 2013 and from more than 28 countries in 2015. Main importers are Norway (28,5 % of its value), that supplies frozen fish, fresh fish and chilled fish to Ukrainian market and Iceland (11,3 % of the total cost) with frozen fish, fish fillets and other fish meat (including minced). Imported fresh and chilled fish is by the most part from Norway (88,8 %), frozen fish – from Norway (22 %), USA (16,2 %) and Iceland (16,2 %) according to sub-segments of fish commodities.

Проблеми інноваційно-інвестиційного розвитку. — 2017. — № 12

Table 1

Dynamics of imports of the main marketable groups of fish commodities in Ukraine at 2011-2015

Marketable groups	2011		2012		2013		2014		2015		2015/2014, %	
	ths. tons	1000 USD	ths. tons	1000 USD	ths. tons	1000 USD	ths. tons	1000 USD	ths. tons	1000 USD		
Fish, crustacean, mollusks and other aquatic invertebrates	346,8	505,4	382,7	687,6	415,3	863,3	307,2	593,8	210,4	289,8	68,5	48,8
Fish, fresh or chilled, excluding filleted and other fish meat	14,1	76,6	25,7	134,5	23,2	149,1	14,4	92,5	10,6	53,2	73,8	57,5
Fish, frozen, excluding filleted and other fish meat	273,2	313,3	302,6	430,1	329,8	562,2	244,8	383,4	181,4	196,9	74,1	51,4
Fish fillets and other fish meat (including minced), fresh, chilled or frozen	44,1	67,4	42,5	77,6	48,5	99,4	37,2	78,3	13,1	25,7	35,1	32,8
Prepared or tinned fish; black caviar and its substitutes	38,2	81,3	35,2	87,4	40,3	91,8	31,3	68,2	15,5	26,6	49,5	39,1
Total:	395,1	606,1	429,8	800,6	469,4	988,9	348,5	685,3	230,2	326,1	66,1	47,6

Theragra, salmonidae are coming from Russia. The other part of the imported sprat is proportionally distributed between Argentina, the Baltic countries, Spain, Canada, Russia, Vietnam and other countries. The delicacy types of fish are supplied by France, Italy and China. The major producers that are supplying fish and seafood to Ukraine are from Norway (Marine Harvest AS Ice Seafood AS, Hallvard Leroy, Norway Royal Salmon, Nergard AS, Norway Pelagic AS, Egersund Fisk Group, CA Mordal Consulting), Scotland (Denholm Seafoods Ltd), Holland (Marine Foods BV), Iceland (Iceland Pelagic, Iceland Seafood ehf), USA (Pacific Seafood), Canada (Ocean Choice International Ltd), Russia (Flayfish, Rosrybtorh), Belarus (Santa Bremor), Lithuania (Benko Servisas). Main importers at 2015 were the European countries – 162,8 ths. tons (70,7 % of the total imported fish); America – 32,8 ths. tons (14,3 % of the total imported fish); Asia – 11,8 ths. tons (5,1 % of the total imported fish); CIS – 9,1 ths tons (4,0 % of the total imported fish); Africa – 8,4 ths. tons (3,7 % of the total imported fish); Australia and Oceania – 3,3 ths. tons (1,5 % of the total imported fish). The amount of imported salmon to Ukraine in 2014 comes down to 976 tons, which is 48 % less than in 2013. In 2015 3 624,8 tons of rainbow trout were imported to Ukraine. In 2015 rainbow trout from Norway was imported in the amount of 991,2 tons, 337,4 tons -from Denmark, 132,1 tons – from Chile, 73,7 tons – from Turkey.

Ukraine has bought the filleted fish and other fish meat (including minced) for 25,8 million dollars USA in 2015. It is 67,2 % less than in 2014. The top three importers with almost equal percentage were Vietnam (6,6 million dollars USA, 25,5 %), Norway (6,25 million dollars USA, 24,2 %) and Iceland (5,37 million dollars USA, 20,8 %). Ukraine has introduced a 10 per cent import duty in February, 2015. Fish and fish products were included to the list of additional taxable goods. The introduction of an additional fee has not justified itself, since the budget revenues have declined. Ukrainian fish market has suffered the most. Even despite the fact that importers have changed approaches and started to import cheaper fish products instead of more expensive (the average price of imported fish for the I half-year of 2014 is 2 dollars USA, in 2015 it is 1,3 dollars USA), the fish imports have still reduced by 40 % in 2015, even more than in 2014. The present situation of imports fish and fish products is due to the lack of specialized fleet, the processing industry, the quota in international waters and poaching. Besides, the cost price of Ukrainian fish import is higher than that of imported fish, which is why Ukrainian fish products are losing.

The amount of exports of filleted fish and other fish meat (including minced) was 1,8 million USD in 2015. The largest importer of Ukrainian fish meat is Germany (4,7 million USD).The export of frozen fish was 247 200 USD; mainly to Latvia (57 tons), Turkmenistan (18 tons), Moldova (49 tons). It was 22,6 % less than in 2014. Ukraine mainly exports fresh fish, chilled fish, canned fish to Russia and Kazakhstan (directly from fishing areas). The amount of exports in all

Проблеми інноваційно-інвестиційного розвитку. — 2017. — № 12

the groups has declined in 2015. Ukraine exports only 98 tons of frozen fish to Europe excluding filleted fish and other fish meat priced at the 92 ths. of USA dollars, fresh fish, chilled fish excluding filleted and other fish meat – 0,4 tons priced at 1,7 ths. of USA dollars, filleted fish and other fish meat (including minced), fresh, chilled or frozen – 1864 tons priced at 8 ths. of USA dollars, crustaceans with or without panzers, fresh, chilled, frozen, dried, salted or in brine – only 260 tons priced at 269 ths. of USA dollars. In 2015 the production of trout was 247 tons, the export of trout amounted to only 5,5 tons for a total amount of 62,9 ths. of USA dollars. Exports of freshwater perch fillets (fresh, chilled or frozen) in 2011 totaled 216,3 tons, in 2013 – 752,6 tons, in 2014 – 1392,5 tons. All produced perch (1392,5 tons) Ukraine exports to Europe. Ukraine exports to Germany 90 % of the perch. It is 996,4 tons worth 4126,1 ths. of USA dollars. To Denmark 151,8 tons worth 624,3 ths. of USA dollars are exported, to Lithuania – 110,6 tons worth 488,5 ths. of USA dollars, France – 90,8 tons worth 561,5 ths. of USA dollars, Poland – 24,0 tons worth 159,6 ths. of USA dollars, the Netherlands – 18,9 tons worth 58,1 ths. of USA dollars. Falling of effective demand due to devaluation of hryvnia has influenced the reduction of import segment. It is time for import phase-out – saturation of the market by fresh, affordable Ukrainian fish products. The demand for aquaculture products has the least realization in Ukraine. Capacity of the market in 600-650 ths. tons might be able to increase by 30-40 % due to the intensive development of aquaculture.

Conclusions and further researches directions. Recommendations for Ukrainian fish trading development: a) need to develop a program for import phase-out of fish products. Ukraine does not have the resource base of clupea, scomber, halibut, atlantic salmon and many other types of fish which the buyers are looking for. Besides, there are conditions to grow European plaice, rainbow trout, Coregonus, channel catfish, perch, starry sturgeon, and American paddlefish. Not only traditional types of fish can be produced, but also those that are currently imported (gilthead seabream, European seabass, tilapia); b) need to expand assortment of fish products through the position of the lower price group; c) need to open an exchange trade for fish and fish products and need to focus in two fields: modern refrigerators and processing enterprises. The need for modern refrigeration storage capacity for today is about 100 ths. tons of simultaneous storage. Fishing in Ukraine is seasonal, that is why it needs the required freezing and refrigerating storage for increasing production capacity; d) to satisfy the growing demand in fish products produced with the new technologies, with fresh materials, packed in convenient packaging and in demand in products that do not need long cooking: filleted fish, fish steaks, surimi (crab and fish sticks); e) to establish appropriate regional distribution centers, preferably with large fisheries or fish-extraction and processing enterprises that is facilitating the interactions with producers; f) to develop an infrastructure that is significantly decrease the prices for consumer market, and an ability to save the large amounts of products will enable to operators of fish market obtain additional incomes and need to establish packing and packaging of finished products and semi-finished fish products; h) have to organize the advertising campaign including the assortment's range that has expanded and has deepened by yet unseen species of fish in recent years and provide an educational work with consumers through the media and TV. Also need to consider that the real situation of the supply and demand balance for decision the measures to protect the domestic market and provide enough information to local producers as to fish market situation so that they can use it to their advantage. Ukrainian market is still a developing one. Special attention might be drawn to a great number of fish and seafood is imported every year. There is a big competition for the local producers with the supermarket chains.

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Олена Олегівна Деренько,
аспірантка, ННЦ «Інститут аграрної економіки»,
вул. Героїв Оборони, 10, м. Київ, 03680
elenashkidchenko@ukr.net

Українська торгівля рибою та продукцією аквакультури

Анотація. Досліджено вплив рибної політики на харчове забезпечення населення світу. Вивчено динаміку виробництва аквакультури і рибальства на ринку. Розглянуто споживання риби і попит на рибу на ринку. Доведено, що ринок риби і рибних продуктів динамічно розвивається сьогодні, що сприяє збільшенню поставок продукції та поступового розширення асортименту продукції. Доведена важливість рибальства для локальних і глобальних продовольчих систем. Представлені дослідження тенденцій реалізації риби та рибної продукції на внутрішньому ринку України. Запропоновано до впровадження розроблені заходи щодо вдосконалення регулювання ринку рибної продукції та аквакультури.

Ключові слова: *рибне господарство, аквакультура, держава, регулювання, попит, пропозиція, рибна продукція.*

Елена Олеговна Деренько,
аспирантка, ННЦ «Институт аграрной экономики»,
ул. Героев Обороны, 10, г. Киев, 03680
elenashkidchenko@ukr.net

Украинская торговля рыбой и продукцией аквакультуры

Аннотация. Исследовано влияние рыбной политики относительно пищевого обеспечения населения мира. Изучена динамика производства аквакультуры и рыболовства на рынке. Рассмотрены потребление рыбы и спрос на нее на рынке. Доказано, что рынок рыбы и рыбных продуктов сегодня динамично развивается, что способствует увеличению поставок продукции и постепенного расширения ассортимента продукции. Доказана важность рыболовства для локальных и глобальных продовольственных систем. Представленные исследования тенденций реализации рыбы и рыбной продукции на внутреннем рынке Украины. Предложены к внедрению разработанные мероприятия по совершенствованию регулирования рынка рыбной продукции и аквакультуры.

Ключевые слова: *рыбное хозяйство, аквакультура, государство, регулирование, спрос, предложение, рыбная продукция.*