МЕНЕДЖМЕНТ

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APPLIED BASIS OF FISH POLICY EFFECT TO PUBLIC FOOD PROVIDING

Urgency of the research. *The article describes the practical aspects of the fish policy, its impact to public food providing in Ukraine and in the world. The proposals of fisheries regulation are considered in the context of the global food system and functioning of national aquaculture and fish products.*

Target setting. *The article aims at studying the problems of fish policy and fisheries functioning. It promotes the development of methodological foundations for solving the problem of food products market.*

Actual scientific researches and issues analysis*. The analyze of fish and seafood products markets are in the focus of many leading scientists and economists: T. Sigbjorn, F. Asche, B. Belton, S. H. Thilsted, N. M. Vdovenko, Y. Sharylo, K. O. Ribalchenko and many others authors.*

Uninvestigated parts of general matters defining. *The lack of focus on the problems of increasing the competitiveness of the fisheries and aquaculture in Ukraine is an example of untapped opportunities that must be implemented to ensure healthy nutrition and food security.*

The research objective *is to study the markets of fisheries products, identifying deficiencies fishing policy in the context of globalization and the development of proposals on food security of the population.*

The statement of basic materials. *Globally, aquaculture is a young sector of the agricultural sector, which is experiencing a period of growth over the past 50 years.*

World aquaculture production is divided into categories: aquaculture in inland waters and mariculture. Fisheries is on five levels: a) the access to the markets of non-agricultural goods (NAMA); b) agreement on subsidies and compensation measures (ASCM); c) trade and environment, especially environmental protection agreements (MEA); d) agreement on antidumping (ADA); e) general agreement on trade services (GATS).

The regulation of international trade in fisheries and aquacultures are complicated by the fact that fish products are not subject of Agreement on Agriculture of the WTO. The main piece of legislation that defines the priority objectives in the field of fisheries is European Regulation "On the Common Fish Policy".

Conclusions. *Fisheries and aquaculture in inland waters is often underestimated during fo planning future development, land and water using and in decision-making process at the state level.*

It is practice advisable to consider the global goals of the World Health Organization to improve nutrition by 2025. To this goal, the future need to develop a mechanism of monitoring of global priorities and sustainable fisheries as food products in all its forms that would find opportunities to solve them in the future.

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ПРИКЛАДНИЙ БАЗИС ВПЛИВУ РИБНОЇ ПОЛІТИКИ НА ЗАБЕЗПЕЧЕННЯ НАСЕЛЕННЯ ХАРЧОВИМИ ПРОДУКТАМИ

Актуальність теми дослідження. *У статті висвітлено прикладні аспекти рибної політики, її вплив на забезпечення населення харчовими продуктами в Україні та в світі. Розроблено пропозиції для регулювання рибогосподарської галузі в контексті формування глобальних продовольчих систем та функціонування ринку вітчизняної аквакультури та рибогосподарської продукції.*

Постановка проблеми. *Стаття спрямована на дослідження проблем рибної політики та регуляторної бази функціонування рибного господарства. Зосереджено увагу на методичних та науково-практичних рекомендаціях вирішення проблем на ринку аквакультури та рибної продукції.*

Аналіз останніх досліджень і публікацій. *Дослідження ринків товарної риби та морепродуктів знаходяться в центрі уваги багатьох провідних вчених-економістів: Т. Сігборн, Ф. Ейш, Б. Белтон, С. Тілстед, Н. М. Вдовенко, Ю. Є. Шарило, К. О. Рибальченко та інших авторів.*

Виділення недосліджених частин загальної проблеми. *Недостатнє зосередження на проблемах підвищення конкурентоспроможності сектору рибальства та аквакультури в Україні є прикладом невикористаних можливостей, які мають бути реалізовані з метою забезпечення здорового харчування населення та продовольчої безпеки.*

Постановка завдання *полягає у дослідженні ринків рибогосподарської продукції, виявленні недоліків рибної політики в умовах глобалізації та розробці пропозицій щодо забезпечення продовольством населення.*

Викладення основного матеріалу. *У глобальних масштабах аквакультура є молодою галуззю аграрного сектору економіки, що переживає період зростання протягом останніх 50 років.*

Світове виробництво аквакультури розділяють на категорії: аквакультура у внутрішніх водоймах та марикультура. Рибне господарство розглядають на п'яти рівнях: а) доступ на ринки несільськогосподарських товарів (NAMA); б) угода про субсидії та компенсаційні заходи (ASCM); в) торгівля та навколишнє середовище, зокрема в тому, що стосується багатосторонніх природоохоронних угод (MEA); г) угода про антидемпінг (ADA); д) генеральна угода про торгівлю послугами (GATC).

Регулювання міжнародної торгівлі рибою і морепродуктами ускладнюється тим, що рибна продукція не є предметом домовленостей Угоди про сільське господарство в рамках СОТ. Основним нормативним актом, що визначає пріоритетні цілі у сфері рибного господарства, є Регламент Європарламенту «Про Спільну рибну політику».

Висновки відповідно до статті. *Рибальство та*

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аквакультура у внутрішніх водоймах часто недооцінюються під час планування заходів подальшого розвитку, використання землі та води та під час прийняття рішень на рівні держави.

У практичній діяльності доцільним є урахування глобальних цілей Всесвітньої організації охорони здоров'я щодо поліпшення харчування до 2025 року. З цією метою, у майбутньому необхідно розробити механізм дії моніторингу глобальних пріоритетів і проблем сталого виробництва риби як харчового продукту у всіх його формах, які б дозволили віднайти можливості щодо їх вирішення в майбутньому.

Keywords: *fishing policy; food providing; market; demand; supply; fisheries; aquaculture; globalization.*

Ключові слова: *рибна політика; продовольче забезпечення; ринок, попит; пропозиція; рибне господарство; аквакультура; глобалізація.*

Urgency of the research. The article describes the practical aspects of the fish policy, its impact to public food providing in Ukraine and in the world. The proposals of fisheries regulation are considered in the context of the global food system and functioning of national aquaculture and fish products.

The influence of the fish policy on food providing are analyzed in the article. The dynamics of aquaculture production and fisheries in the world market are analyzed.

The main goals of the Joint EU fish policy in the context of globalization are identified. Importance of fisheries for local and global food systems is proved. The analysis of legislative and regulatory support aquaculture development in Ukraine are considered. The measures of improving the regulation of the market of fishery products and aquaculture are developed.

Target setting. The article aims at studying the problems of fish policy and fisheries functioning. It promotes the development of methodological foundations for solving the problem of food products market.

Global food problems induce humanity to create conditions of guarantee access to quality food in the optimal quantity. The world population growth is ahead of food, and hunger and malnutrition are a risk to human health. The fish production has important role for animal production segments with all infrastructure, processing, storage and marketing of fish products. The need of the world to ensure environmentally safe and affordable fish in reducing fishing in the seas and oceans, enable manufacturers to interfere with the fish production and other aquatic biological resources in the artificial, fully controlled conditions of aquaculture.

Previously aquaculture seen as part of fisheries and fish products were considered as one of the elements of fisheries. Today, this area of fisheries in the world is considered as independent direction in the context of the global challenges of food fishing countries could rapidly develop aquaculture through it and provided 1/3 volume of global food fish and fish products.

Actual scientific researches and issues analysis. The analyze of fish and seafood products markets are in the focus of many leading scientists and economists. According to leading foreign researchers Sigbjorn T. and F. Asche, the increase artificially grown products of aquaculture, especially in Asia, helped to stabilize the price of fish, keeping them at a level accessible to poor people [9, p. 784-786]. Aquaculture also has a positive effect on reducing the volatility of prices by strengthening control over the production of fish and fish products, stabilization of supply, scientists proved that B. Belton, I.J.M. van Asseldonk, S. H. Tilsted [6, p. 77-87; 10, p. 609-620]. Undoubtedly, the opinion confirms that fishing and aquaculture can play an additional role in increasing the availability and accessibility of fish and seafood. In international and national scientific professional literature actively studied the problem of increasing competitiveness fishing industry, particularly in the articles of N. M. Vdovenko, S. S. Shepelev [1] Y. Sharylo and K. O. Rybalchenko [3].

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The research objective is to study the markets of fisheries products, identifying deficiencies fishing policy in the context of globalization and the development of proposals on food security of the population.

The statement of basic materials. Globally, aquaculture is a young sector of the agricultural sector, which is experiencing a period of growth over the past 50 years (Tab. 1).

Table 1

The dynamics of aquaculture and fisheries production in the world (2004-2014), millions tons [1; 7]

Indicators	Years											Deviation (+,-)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2004 to 2012	2004 to 2014
Total world fisheries	134,3	136,4	137,0	139,8	142,2	145,1	147,9	155,7	157,9	162,9	167,2	+ 23,6	+ 32,9
Inland waters: fishing aquaculture	33,8 8,6 25,2	36,2 9,4 26,8	38,4 9,7 28,7	40,7 10,0 30,7	43,1 10,2 32,9	45,1 10,1 35,0	47,5 10,1 37,4	49,8 11,1 38,7	53,5 11,6 41,9	56,5 11,7 44,8	59,0 11,9 47,1	+ 19,7 + 3,0 + 16,7	+ 25,2 + 3,3 + 21,9
Sea water: fishing aquaculture	100,5 83,8 16,7	100,2 82,7 17,5	98,6 80,0 18,6	99,1 79,9 19,2	99,1 79,4 19,7	100,0 79,9 20,1	100,4 79,5 20,9	105,9 82,6 23,3	104,4 79,7 24,7	106,5 81,0 25,5	108,2 81,5 26,7	+ 3,9 – 4,1 + 8,0	+ 7,7 – 1,8 + 10,0
Total fishing	92,4	92,1	89,7	89,9	89,6	90,0	89,6	93,7	91,3	92,7	93,4	– 1,1	+ 1,0
Fishing in % of world catches	68,8	67,5	65,4	64,3	63,0	62,1	60,6	60,2	57,8	56,9	55,8	– 11,0	– 13,0
Total aquaculture	41,9	44,3	47,3	49,9	52,6	55,1	58,3	62,0	66,6	70,3	73,8	+ 24,7	+ 31,9
Aquaculture in % of world catches	31,2	32,5	34,6	35,7	37,0	37,9	39,4	39,8	42,2	43,1	44,2	+ 11,0	+ 13,0
Consumption of fish products: public food non-food consumption	104,4 29,9	107,3 29,1	110,7 26,3	112,7 23,4	115,1 22,2	117,8 22,1	120,7 19,9	131,2 24,5	136,2 21,7	141,5 21,4	146,3 20,9	+ 31,8 – 8,2	+ 41,9 – 9,0
Population (billion person)	6,4	6,5	6,6	6,7	6,8	6,8	6,9	7,0	7,1	7,2	7,3	+ 0,7	+ 0,9
Per person (kg)	16,3	16,5	16,8	17,6	17,9	18,1	18,5	18,7	19,2	19,7	20,1	+ 2,9	+ 3,8

Aquaculture production increased from less than 1 million tons in 1950 to 55.1 million tons in 2009, 58.3 million tons in 2010 and 66.6 million tons in 2012 and growth in three times higher than the global production of meat - 2.7% for poultry and livestock. According such development and the projected to 2030 the half extracted fish and other aquatic biological resources will just artificial.

World aquaculture production is divided into categories: aquaculture in inland waters and mariculture. Aquaculture in inland waters is produced in fresh water, but some domestic production using brackish water (Egypt) and inland saline ponds (China). Mariculture includes production in the sea and land (onshore) facilities and structures. Global fisheries for human consumption in aquaculture in inland waters and mariculture in 1980 was at the same level of 2.35 million tons. Aquaculture in inland waters growing faster than mariculture. Annual growth is respectively 9.2% and 7.6% and increased from 50% in 1980 to 63% in 2012. From 66.6 million tons of edible fish grown in 2012, 2/3 (or 44.2 million tons) was fish grown in aquaculture in inland waters (38.6 million tons) and mariculture (5.6 million tons) [1].

Global production of fish in aquaculture in 2013 increased by 5.8% to 70.5 million tons and production of farmed aquatic plants (including different types of seaweed) amounted to 26.1 million tons. Only in 2013 China produced 43.5 million tons of fish for human consumption, and 13.5 million tons of seaweed. During the period from 1970 to 2012 China's aquaculture production increased on average by 10.4% per year [7].

Production of 15 major producing countries (China, India, Vietnam, Indonesia, Bangladesh, Norway, Thailand, Chile, Egypt, Myanmar, Philippines, Brazil, Japan, USA, Republic of Korea) reached

92.7 % of total food fish production in aquaculture in 2012. China's share in world production is 61.7%. Egypt and Chile were included to the producers with production more than 1 million tons in 2012 [7].

Aquaculture production of Norway has increased in 10 times for the past 20 years. For example, in 1987, when trade volumes growing USSR reached 350 thousand tons, in Norway the corresponding figures were 7 times less. According to the "Program of development of the fisheries by 2020", the share of fish farms in Norway exports has reached to 95%, according to official statistics [3].

As a highlight of the studies, the forecast to 2050 world population will grow to 9 billion people, leading to a growing need for fresh water and further pressure on freshwater ecosystems. Existing national institutions and systems of governmental management in general are not prepared to deal with the pressure on freshwater fish and fishing that are growing. For this purpose, during the discussions on food security at the "Global Conference on fisheries in inland waters: fresh water, fish and future", held at FAO headquarters in Rome on 26-28 January 2015 figures are covering the indicators of fisheries in inland waters[7]:

- 780 million hectares of lakes, reservoirs, rivers and wetlands around the world;
- 470 million people living downstream of the dam in the river villages, and they can influence the development of dams and irresponsible management of water as a mineral resource;
- 60 million people are involved in small-scale fishing in inland waters (30 million of them - women);
- 40,000 large dams exist worldwide;
- 15,000 kinds of fish live in fresh and brackish waters (and only catch reported to the FAO 257);
- 100 useful kinds of aquatic animals found in rice checks, which is an example of good governance;
- 100% expected increase in water withdrawal by 2050;
- 90% of the global fish catch in inland waters account for developing countries;
- > 50% of public fish food comes from aquaculture;
- 65% of the world's rivers are at medium and high threat (existence);
- <1% of the catches and emissions come from fishing in inland waters.

Important that fish and fish products market refers to non-agricultural goods in the world. The access of Ukraine to the non-agricultural goods market is a key quastions of trade negotiations at the Round "Doha-Rozvytok". Negotiations will take place in the framework of The Committee with negotiations trade.

Fisheries is on five levels: a) the access to the markets of non-agricultural goods (NAMA); b) agreement on subsidies and compensation measures (ASCM); c) trade and environment, especially environmental protection agreements (MEA); d) agreement on antidumping (ADA); e) general agreement on trade services (GATS).

The regulation of international trade in fisheries and aquacultures are complicated by the fact that fish products are not subject of Agreement on Agriculture of the WTO. The studies of Y. E. Sharylo [3] and S. S. Shepelev [4] have shown sustainable use of fisheries resources is one of the pressing issues in the context of solving the problem of depletion of natural resources. Today European Union seeks to pursue effective policies covering fisheries, environment, sea fishing and conservation of marine biological resources and managing the definition of such species in fisheries. The main piece of legislation that defines the priority objectives in the field of fisheries is European Regulation "On the Common Fish Policy". It regulates the organization of the market products as fisheries and aquaculture, protection of water biological resources and coordinate EU assistance programs [2].

This Common Fish Policy was only from 1983. Common Fish Policy has a general legal basis (Articles 32-38 of the Treaty establishing the European Community) and goals: increase fish productivity of reservoirs; to stabilize markets; warranty provision and delivery of products to consumers at reasonable prices. It includes, in view of the market and financial measures, freshwater biological resources and activities in the field of aquaculture and processing, marketing of fisheries and aquaculture products. Like the Common Agricultural Policy, the Common Fish Policy is an area of shared responsibility and the EU Member States and has a decisive impact on the competitiveness of fisheries.

Ukraine traditionally was considered like "fish country" and the development of the field is determined by natural and climatic conditions. Last years domestic fisheries requires the introduction of

such measures: to increase production of fish, create favorable conditions for producers, depriving the country's dependence on imports and of state industry regulation, which will help create a competitive system of regulation of fisheries in accordance with international standards and WTO requirements and EU directives.

The State Agency of Fisheries of Ukraine is a central governmental department that implements the state policy in fisheries and fishing industry, protection, using and reproduction of aquatic resources, regulation of fisheries, maritime safety of vessels fishing fleet.

The activities of The State Agency of Fisheries of Ukraine directs and coordinates by the Cabinet of Ministers of Ukraine and The Ministry of Agrarian Policy and Production of Ukraine according to The Provisions of the State Agency for Fisheries of Ukraine (16.04.2011 № 484/2011).

State regulation of fisheries was formed on the basis of Ukrainian laws, as in other areas of agriculture. However, fisheries has technological features that determine the specificity and production and organizational structures, represented by companies which specialize in mining, cultivation, processing fish.

Ukraine has not included to the world leaders in the field of artificial cultivation of commodity fish.

Total domestic catch of aquatic biological resources for the past 20 years decreased by 5 times in Ukraine. If we analyze the absolute value, the reduction in catches in industrial fisheries and aquaculture seemed the same, and made for the same period approximately 3.5 times [4].

The decline of aquatic biological resources catches of natural origin marked the last 10-15 years in many countries. Regarding aquaculture, the situation in the world has changed towards increase, and in Ukraine - an even greater reduction in catch basins. Ukraine has developed and approved same national programs for the industry.

In January-March 2016 The amount of fish catches and other water biological resources extraction companies and individual entrepreneurs engaged in fisheries activities, compared to the corresponding period of 2015, decreased by 12.6%.

The volume of budget allocations to development of fisheries farms increased from UAH 33.9 million (including the costs of fisheries regulation) to 116 4 million per year over last 10 years,

The current system of budget financing for fisheries now significantly improved. Before spending from the state budget consisted of one item of expenditure in reproduction and protection of water resources and regulation of fishing. Today, there are separate articles for the organization of activities of fishery protection and reproduction.

The legislation regulating base of aquaculture development is the Law of Ukraine "About aquaculture" from 18.09.2012, number 5293-VI. An important role for activities play: Laws of Ukraine " About fisheries, commercial fisheries and conservation of aquatic biological resources" from 08.07.2011 number 3677-VI; "About fish, other aquatic living resources and food products from them" from 06.02.2003 number 486-IV; "About fauna" from 13.12.2001 number 2894; "About Ukraine's accession to the Convention on International Trade in Endangered Species of Wild Fauna and Flora Endangered" from 14.05.1999 number 662-XIV; "About breeding business in animal" from 15.12.1993 number 3691-XIII and others.

Conclusions.

1. The global attention to the depletion of fish stocks focused primarily on marine fish, despite the importance of it is freshwater fish in the world. Fisheries and aquaculture in inland waters is often underestimated during fo planning future development, land and water using and in decision-making process at the state level.

2. Malnutrition has affects the health and welfare of the population and is powerful burden as socioeconomic cost to families, communities and country.

3. It is necessary, the scientific research must include economic, social and cultural rights, the rights of any person sufficient to obtain safe and healthy food according to The International Covenant of the United Nations Organization.

4. It is practice advisable to consider the global goals of the World Health Organization to improve nutrition by 2025. To this goal, the future need to develop a mechanism of monitoring of global priori-

ties and sustainable fisheries as food products in all its forms that would find opportunities to solve them in the future.

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