Study of agricultural export prospects

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Abstract. The issues concerning the study of prospects of agricultural products export are considered in the article, including working out a strategic plan of Russian seafood export development. The analysis of revealed priority export markets for fish and fish products is conducted using a number of indicators in order to work out the encouragement and support tools of development of fish and seafood export from Russian Federation. The basic mechanisms of state support of seafood export development are described as one of the priority guidelines of agro-industrial complex development.

1 Introduction

In the context of modern economy strategic development, it is agricultural export that can be considered as the most important indice of growth and stability. There is a need to achieve the agricultural export level of at least 20% of GDP, which will promote the improvement of Russian economy competitive positions [1-4].

The principal aim of this study is to identify the prospects of Russian fish and seafood export since the given segment grows rapidly and becomes attractive for outer market.

At present, there has been an active development of techniques of the fishing export sector enhancement, which include capturing of new geographical supply directions and increase of processed products share. However, the volume of processed production depends on the investment environment in the country, which is one of the problems having a negative effect on export development in Russia. The following equally important challenges are also highlighted [5]:

- insufficient state support of the fish and seafood export merchants;
- poor development of transport and logistics networks;
- high degree of industry fixed assets depreciation;
- strong administrative burdens.

Let us specificate in Table 1 the problems affecting the development of the fish and seafood products export from Russian Federation.

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Table 1. Analysis of the problems of fish and seafood products export from Russian Federation.

Section	Problem
Ship-building industry	At present fishing vessel building is not a priority area.
	The fishing fleet capacity is reducing. These days the fleet is reinforced mainly by the used foreign ships.
	There remains high degree of production capabilities depreciation (both moral and physical).
	The production infrastructure makes it impossible to build vessels or ships using large-sized blocks.
	The lack of large construction sites limits the possibility of large-capacity ships and vessels building.
Fish and seafood producing industry	The Russian fishing fleet includes more than 2,000 vessels with high depreciation degree.
	The lack of investment quotas does not contribute to the fishery development of Russian Federation.
	The productivity of the current fishing fleet is limited by the design features of the vessels and possibility of only slight improvements.
	The critical lack of the latest capacities with temperature conditions for cargo storage.
Fish and seafood processing industry	The fish processing enterprises capacity utilization makes up about 60%.
	Limitations of freezing and processing capacities with predominantly manual labor.

The problems identified have led us to conclusion that it is necessary to develop measures which will give the opportunity to propel the export of fish and seafood products from Russian Federation to the next level.

2 Materials and methods

Before discussing the prospects of fish and seafood products export, it is required to represent the statistical investigations that express the potential capacity of seafood production in Russia [6].

The fishing fleet is the centrepiece of capabilities for fish and seafood extraction. It amounts to more than 70% of the industry fixed production assets and provides more than 90% of the total catch. More than 92% of the total volume of frozen products, more than 96% of fish-flour and about 15% of canned products are produced on the vessels [7-9].

Let us consider the condition of Russian civil maritime fleet from 2015 to 2017 that showed quantitative decrease by 30% (Table 2).

Table 2. The number of marine vessels (indicator value per year, units).

Vessel type	2015	2016	2017
Fishing base-ships and fish-transport vessels	26	24	22
Fishing vessels	843	838	820
Support ships, tending vessels	42	43	49
Research vessels	75	76	74

For the period from 2015 to 2017 fishing vessels (the largest group) felt more than by one half. Under conditions of economic crisis, the ship owners in countries with developed fishing industry (Iceland, Norway, EU, and others) refocused in a substantial way on improving of existing vessels instead of building new ones. Due to this decision, the

lifetime of vessels cost-efficient operation was significantly increased. The market of ship technical maintenance, modernization and repair services is also developed in mentioned countries. At the same time, Russian fleet needs to be improved and updated in order to increase fishing economic efficiency by reducing fuel consumption, engine noise, increasing the speed of the vessels with fishing gear and others, as well as making the vessel operation key indicators consistent with international requirements [10-11].

Let us consider the dynamics of fish and seafood production in Russian Federation (Table 3).

Table 3. The volume of fish and seafood production, thousand tons.

Products	2015	2016	2017	2017 as a percentage of 2016, %
Live, fresh or chilled fish	1176	1341	1368	102
Non-frozen shell fish (not fish-farming production)	67.9	63.6	69.3	108.9
Fresh or chilled fish fillet, other fish flesh (including comminuted fish)	18.8	20.7	18.1	87.4
Frozen fish	2897	3007	3057	101.7
Frozen fish fillet	123	141	145	102.8
Dried fish, salted and unsalted or in brine	49.1	47.3	106	224.1
Smoked fish (including fish fillet)	57.2	53.0	58.4	110.2
Frozen shell fish	44.4	50.3	69.9	138.9

For the period from 2015 to 2017 there has been observed the increase of production volume of all types of fish products. The largest increase is seen in the sector of dried and salted fish production (by 2.24 times). The indicators of fish production volume dynamics are shown in Table 4.

Table 4. The indicators of fish and seafood production dynamics for the period 2015-2017.

Products	Production average, thousand tons	Annual average absolute growth (reduction), thousand tons	Annual average growth rate, %	Annual average rate of increment of growth (reduction), %
Live, fresh or chilled fish	1307	31	104.4	4.4
Non-frozen shell fish (not fish-farming production)	54.5	4.2	114.9	14.9
Fresh or chilled fish fillet, other fish flesh (including comminuted fish)	18.2	0.2	102	2
Frozen fish	2845	55.4	103.5	3.5
Frozen fish fillet	110	10.5	119.3	19.3
Dried fish, salted and unsalted or in brine	60	8	120.6	20.6
Smoked fish (including fish fillet)	59	0.18	100.6	0.6
Frozen shell fish	39	6.9	134.3	34.3

The annual average increase of production of live, fresh or chilled fish amounts to 31 thousand tons (4.4%), frozen fish - 55.4 thousand tons (3.5%), fish fillet - 10.5 thousand tons (19.3%).

It is important to compare these indicators with the world industrial fishing volume (Table 5).

In 2016 the world industrial fishing volume amounted to 90.9 million tons, which is little less than in 2015. The catch rates in the seas and inland waters are 87.2% and 12.8% of the total catch, respectively.

The marine fisheries production volume amounted to 79.27 million tons in 2016. The largest decrease of the marine fisheries production volume is observed in Peru by 54.08%, in Chile - by 51.31%, in Thailand - by 49.43%, and in Iceland - by 46.46%. China, Indonesia, Vietnam, Russia, India, Malaysia, Morocco, Denmark and Ecuador increased the marine fisheries production volume in 2016.

Table 5. The indicators of the dynamics of marine fisheries production volume for a series of years.

Country / territory	Average production volume of marine fisheries, million tons	Annual average absolute growth (reduction), million tons	Annual average growth rate, %	Annual average rate of increment of growth (+) / reduction (-), %
China	14.5	0.34	103	3
Indonesia	5.8	0.15	103.4	3.4
USA	5.0	-0.05	98.8	-1.2
Peru	5.2	-0.89	82.3	-17.7
Russia	4.1	0.09	102.8	2.8
Japan	3.53	-0.12	95.9	-4.1
India	3.4	0.07	102.5	2.5
Chile	2.14	-0.31	83.5	-16.5
Vietnam	2.4	0.21	113.0	13.0
Burma	1.8	0.03	103	3.0
Norway	2.23	-0.1	94.6	-5.4
Philippines	2.0	-0.03	97.8	-2.2
Republic of Korea	1.6	-0.05	95.6	-4.4
Thailand	1.7	-0.26	84.4	-15.7
Malaysia	1.4	0.06	105.2	5.2
Mexico	1.37	0.01	101.2	1.2
Iceland	1.37	-0.18	85.5	-14.5
Morocco	1.23	0.10	112.0	12.0
Total in the world	80.9	-0.67	99.0	-1.0

The world volume of marine fisheries production reaches 80.9 million tons at the average with the annual average reduction of 1%. The largest annual average increase of marine fisheries production volume is observed in Vietnam (by 13%), Morocco (by 12%), Malaysia (by 5.2%), Indonesia (by 3.4%) and China (3%). The largest decrease of annual average absolute growth and growth rates is observed in Peru, Chile, Thailand and Iceland.

3 Results

The analysis of statistical data demonstrated that Russian fishing industry market has high export potential. However, it is necessary to create mechanisms of efficient implementation of export transactions, the most important of which, in our view, include the following:

1. Development and implementation of export transactions insurance scheme.
2. Organization of the efficient export logistic network.
3. Organization of stock exchanges for export products electronic trading.

4. Branding of fish and seafood products.
5. Development of system of export transactions regulatory support and so on.

Let us review the mechanism of development and implementation of export transactions insurance scheme in further detail.

Currently the system of fish and seafood export insurance is not developed in Russia [12,13].

The organization of such system is seen as follows, taking into account international practices. Insurance should be carried out by the government agency, which functions are similar to China's Sinosure. The powers of the existing Eksar agency should be expanded for this purpose [14,15]. The separate division for fish and seafood insurance can be organized in the agency. The functions of the division may also include interaction with the regulatory authorities of foreign countries and counterparts of insuring parties in order to settle economic disputes and reduce the impact of political risks.

Table 6. Suggested insurance lines.

Risks	Insurance lines	Note
It is quite difficult to insure the catch-failure for a fishing company that has its own vessels and quotas because of the high degree of wear of vessels with useful lifetime of more than 25 years.	Insurance of transport vessels with application of rates and deductible franchise. Additionally, the introduction of government guarantees.	The smaller is the deductible under the insurance contract, the higher is the insurance rate and vice versa.
No insurance of medium-term and long-term contracts.	Insurance of medium-term and long-term contracts.	For medium-term and long-term contracts the insurance coverage can be provided in the amount of no more than 85% of the contract value. If foreign producers participate in the project, the interests of Russian participants of the export contract are protected in the first place.
Incurrence of political risks as a consequence of putting fish products in the sanctions list. The risk can cause increase of costs and loss of profit.	Insurance of financial losses upon incurrence of political risks.	Insurance of financial losses upon incurrence of political risks with compensation of 85% of the insurance company's expenses when paying insurance indemnity.
Exporter's payment risk.	Use of documentary credits consistent with UCP 600 ("Uniform Customs and Practice for Documentary Credits", developed by ICC).	The bank service that allows not to be concerned about the outcome of the large-scale deal. Sberbank takes the responsibility for transaction payments settlement: the seller is confident that he will receive the money, the customer is confident that he will receive the goods.
Instability (growth) of the ruble exchange rate.	Forex hedging by means of forward contracts or non-stop options for currency sale.	When choosing a forward contract, the exporting company does not spend its funds, but is obliged to sell the currency at the exchange rate defined by the contract, and place cash collateral on bank deposit. Thus, companies focusing on the export of goods get better

		protection from exchange risks.
Logistical risk is one of the most significant in the export of fish and seafood products. Even slight changes of terms of delivery or storage conditions can lead to damage or loss of the product, which is the main logistical risk, causing huge losses.	Cargo insurance while transporting and storing goods.	This insurance is organized as follows: - for each individual transport / storage (the Policy of insurance is issued); - for each separate delivery parcel (the Global Policy is issued); - for the annual insurance period, when any cargo is insured in line with the annual agreement (Open Cover Insurance Policy is issued).

The insurance terms may be as follows:

The insurance events include delayed payment of foreign contracting parties, as well as trade disputes.

The event is considered as insurable if the exporting company suffers financial losses from the specified events, while with due diligence complying with the terms of the contract, Russian legislation, international regulations and conventions along with the legislation of the country where the transactor is registered.

The rates for every insurance object are determined on the individual basis considering characteristics of the transactor, its registration country and current political situation. Insurance settlement payments are guaranteed by the government.

The term of the agreement is determined in accordance with the term of the contract.

The size of damage of exporting company is determined as the cost of lost property (the cost of repairing damaged property) and unpaid obligations of transactors.

Obligations under contracts are considered unpaid if the payment is delayed for more than six months. The property is considered lost if it is destroyed or expropriated and held by the foreign government or third parties for more than six months.

Final products are considered lost if they were expropriated by representatives of foreign countries and their cost was not refunded within three months.

Damages from unpaid obligations are determined as the value of unpaid obligations of foreign transactors, taking into account the fines and penalties stipulated in the contract by the time of insured event.

The damage in case of injury or withdrawal of property is determined on the basis of the balance sheet value or replacement cost of the property adjusted for depreciation by the time of insured event.

The damage in case of final products withdrawal is defined by the market value of the final products by the time of insured event.

The insurance indemnity is paid in the amount of up to 95% of damages for political risks and up to 90% of damages for trade risks (the deductible franchise is used).

4 Conclusions

Thus, the prospects of strengthening of Russian Federation in the cross-border market of fish and seafood products are related to solution of a number of problems:

- the lack of the export insurance system for fish and seafood supplies requires development of the unified system of fish and seafood export insurance along with reduction of risks of fish and seafood exporters;
- the lack of specific legal framework for implementation of export insurance of fish and seafood supplies requires establishment of uniform, comprehensible and translucent rules of export insurance;

- underinvestment in the development of new fishing equipment requires the issuance of research concessions, in which the company can develop new concepts of fish ponds and apply prototypes without payment of license duty during 15 years;
- low level of awareness of fish exporting companies requires the explanatory work to inform companies about growth opportunities (including types and mechanisms of state support), information and consulting support of prospective exporters, development of competencies in the field of export activities via creation of special programs;
- the construction of fishing vessels is not priority task of industrial shipbuilding - the construction of 50 fishing vessels by 2023 will increase the volume of fish and seafood production by 50%;
- the lack of skilled staff throughout fishing industry requires introduction of innovative management and training mechanisms to provide skilled staff for production and processing of fish products. Monitoring of human resourcing indicators and forecasting the industry's demand for personnel is also needed;
- insufficient development of price mechanisms. Development of the benchmark in the fishing industry, futures trading of “fish equivalent” can form specific pricing mechanism, recognized worldwide, raise additional investments in the fishing industry, broaden the range of products, and eventually create a center of world open trade of similar types of goods.

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