# Positioning of Russian Fishing Industry Complex

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#### Abstract

Paper observes the present condition of Russian fishing industry complex. The main purpose of the research study general problems influencing sustainable development of fishing industry and key features of the future advancement of Russian fishing industry complex are concerned. The implementation of the purpose of the research determines the formulation and solution of the following fundamental challenges: to analyze the scenario approach to the development of fishing industry in Russia, to identify problems of Russian fishing industrial complex and to consider competitive environment of Russian fishing industrial complex in Asia Pacific Region. In the course of research the authors used the systematic and logical analysis, methods of scientific analysis and synthesis, method of comparative analysis, economic and statistical methods etc.

Keywords: Agriculture; Natural Resources; Energy; Environment; Other Primary Products

#### 1. Introduction

The foreground problem of current economical situation in Russia is the searching of new approaches to the formation of economic policy for the increasing competitiveness of the national economics. Globalization of scientific knowledge about functioning and development of marine ecosystems is on the way. Significance of environmental requirements as the instrument of non-tariff regulation is growing. Russian fishing industry is export-oriented with steady position in the world fish market. According to the general experience, if development of fishing industry is not managed, and it moves forward only under market trends, the result of free development leads to the growing threats to food safety. Bionomic disbalance rises, economic profit dissipates and disappears, and the branch loses stimulus to future development.

The importance of the research issue is firstly determined by the importance of fishery industry as an important sector of the national economy. Secondly, the ways of solving these problems of providing country with fishery products are different, but interrelated and interdependent. Third, the state policy at the sphere of the Russian fishery investment support complex requires the revision and scientific reasons, including at the regional level as well.

### 2. Method

Theoretical and methodological basis of the research were: a systematic approach to the explored object and subject; the position of papers of national and foreign professors about theory and practice of the fishery industry functioning; a conceptual approach which was embodied in the statutory instruments of Russia and a in a number of the economic-developed countries, and the regulatory and procedural documents of the appropriate organizations. In the course of research the authors used the systematic and logical analysis, methods of scientific analysis and synthesis, method of comparative analysis, economic and statistical methods etc. The Data from the State Statistics Committee of the Russian Federation , the State Committee for Fishery, Ministry of Economic Development of Russia, the forecasts of the social economic development of the country, the data from researching institutes of fishing industry the national and foreign publications, materials, scientific and technical meetings, conferences and symposia on this issue, and the work of authorship about economic development were the factual and statistical base for this research.

### 3. Literature Review

The level of fish consumption and its products is an important indicator of quality of life. The satisfaction of need for these products is provided by fishery complex which is presented as diversified production and economic body.

As a result of the privatization which was carried out in the current social economic reform, there was formed the sector of multi-structural economy and exchange relations. However, this situation has not led to the improvement in the economic situation of the Fishery Industry. Moreover, the import of fishery products was greatly increased and the production of the national producers was decreased.

The deteriorating of situation in the industry is explained by the fact that not enough attention is paid to such actual issues as the effective consumption of potential output, including human resources, improvement of the competitiveness of fishery products and the economic stability of industry, improvement of the economic relations, development of cooperation and integration of production, reduction and trade of products, intensification of innovative processes.

So a lot of scientific works are devoted to the research of theoretical, methodological and methodical problems of the economic development of the national economy.

L.I Abalkin (Abalkin, 2009), N.D Kondratiev (Kondratiev, 1989), G.S Strumilin (Strumilin, 1925), N.D. L`vov (L`vov, 1999) made a large contribution in the organization of scientific aspects to solve these problems.

Among foreign scientists, the most famous works which are devoted to theoretical research of the economic relations are published by J. Geybleyt (Geybleyt, 1976), J. Keynes (Keynes, 1993), A. Marshall (Marshall, 1998), K. Menger (Menger, 1992), A. Smith (Smith, 1904).

The economy of the Fishery Industry, among them the Far East, is explored in publications of Y.M Azizov (Azizov 2000), Y.U. Bobylov (Bobylev, 2014), V.A. Dvoryankov (Dvoryankov, 2000), V.P. Gorshechnikov (potter's field, 1995), S.A. Studenetsky (Studenetsky, 2002), Yu.A. Shpachenkov (Shpachenkov, 1992), and in a great number of works which were published by foreign economists.

### 4. Results

#### 4.1 Scenario approach to the development of fishing industry in Russia

Scenario approach is the important method in strategic management. It allows to define vector and path of development, and to describe the matter and sequence of actions of the main strategic competitors at the fish market. Key features of scenario approach are the pattern, the probability, and the trend that give the best description of functioning and development of fishing industry complex featured high uncertainty, weak factor distinctness, and low level of knowledge about bionomic nature of resource base. Scenario approach differs from concepts, programs, plans, and other methods of strategic planning. Absence of fixed target indicators, probability of result, and multidirectionality of behavior are the essence of scenario approach. Concerning international experience, the majority of development scenarios are classified by two criteria, the state policy criterion and the temporal criterion. State policy criterion means that scenario is considered from the point of scale and depth of the federal government participation in the industry development. Second one, the temporal criterion, allocates short, middle, and long-term scenarios of development and is connected to the development dynamics with predicted estimations of water biological resources. These criteria, certainly, should be mentioned. However type of market has to be accepted as the base backbone criterion. Type of market is defined by characteristics of dominating production that may be primary, mass or individualized.

Conceptual structure of the scenario approach to the development of fishing industry is represented in the form of the conjugated logically interrelated system of eight components: type of the market of fish goods; character of market development; technologies of fish production; business environment; state legislation; social institutions; ways of integration into the international fish market; strategy of allocation of fish processing facilities, elements of logistic infrastructure and trade centers on the world map. Depending on the type of the market and on the source of competitive advantages the following three types of scenario approaches to integration of the Russian fishing industry complex in the international fish market may be specified:

- Resource-focused. This type of development is typical for about 95% of Russian fishing companies and forms about 80% of added value in fishing industry.
- Technologically dependent. This type of development is typical for about 5% of Russian fishing companies and forms about 20% of added value in fishing industry.
- Innovative. For the moment it is mostly absent, or rarely at the level of experiment. Does not form the added value in noticeable amounts.

### 4.2 Problems of Russian fishing industrial complex

As the fishing industry totally dependent on the raw materials, the fishing industrial complex exhibits all common problems of primary sector. Simultaneously it poses a number of features that cause specific requirements to the formation of managerial and control system. These features include:

- High level of forward uncertainty of the material base due to the weak knowledge about marine ecosystems, especially outside the Russian exclusive economic zone;
- High ratio of capital intensity of industrial and logistics infrastructure requires the targeted mechanisms of investment support from the federal government;
- High level of concentration of fish processing facilities in the certain regions and local territories where other forms of economic activity are insignificant;
- Seasonality and irregularity of production yield in high level of social risks that require specific instruments of social support;
- Low level of industry capitalization: as for 2010 the average cost of access to Russian bioresources was estimated as 95 US dollars of fixed capital per one kilo of production. For the reference, the same parameter in USA was 1250 US dollars, or 13 times higher, and in EU was 1450 US dollars, or 15 times higher;
- Excessive obsolete fishing fleet were designed for processing of traditional mass species: productive ability of fishing fleet exceeds allowed amount of catch (the amount being catch without irreversible consequences for reproduction) 1,5 up to 3 times for various species of water bioresources; that is also a reason for irrational withdrawals and illegal catch;
- Growing load on the exclusive economic zone of Russia (more than 95 % of total catch in Russian fishery) causes the more than 10 times growth of the federal and local taxation expenses aimed to protection of marine biological resources in 2010 respectively to 1998;
- Strengthening international environmental protection and preserve actions causes the growth of ecological expenses for business and especially for small business engaged in coastal fishing;
- Uncertainty in borders and procedures of the coastal fishing in terms of regional regulation.

Five groups of disbalances had formed in Russian fishing industrial complex during 1993-2010. These disbalances constrain the development of industry and its competitiveness in domestic and international markets.

First group of disbalances may be described as the disbalance between the *nonmarket* nature of the water biological resources that are the national property, and the *market* utilization of these resources in terms of pursuing the profit.

Russian government formed a complex system of mutual relations that forces business to cover both necessary expenses for securing of stability of fishing industry and all governmental services including inexpedient ones. In response the business tries to decrease the burden of federal interest in production costs that may be reached by illegal or overquoting catch or by leaking from the system of national border and custom control.

The second group of disbalances is the disparity between interests of proprietors of primary resources and producers of consumer products in the sharing of profit.

The Russian government establishes the direct payments for the preserve and protection of water biological resources, profit taxes, custom payments, and tries to withdraw from industry the resource rent by means of different

fiscal tools. Profit redistribution significantly reduces the market competitiveness of fishing industry at the consumer market both international and domestic, and at the market of production factors.

The third group of disbalances is the disparity between high level of system risks and absence of a certain position of the state at the field of formation legal and institutional conditions of fishing business.

High level of risks in industry arises from, on the one hand, the objective features of industrial activity for which considerable cyclic fluctuations are inherent, and that demands the excessive capital, material as well as human. On the other hand, there are growing restrictions to the access to resource base. For risks minimization the fishing business concentrates the extraction of attractive highly profitable bioresources in Russian exclusive economic zone. Attempting to decrease the administrative expenses the fishing and transportation vessels are moving to foreign ports for maintenance and supply.

Departmental disconnection in federal and local government leads to the situation when the state protects the interests of separate branches of economics but raises the level of economic risks for fishing industry. For example, protective measures were implemented for constraining the import of shipboard and catch equipment, and in fact thus the government had created obstacles for maintenance of fishing ships in the Russian ports and ship yards. To extend the competition at domestic market the government gradually reduces the tariffs and non-tariff barriers for imported fish production. That may lead to realization of risks of loss of significant part of fish market by the Russian business, especially high-quality goods for middle and high level consumers.

The fourth group of disbalances is an internal disparity between the large companies with transparent business and the enterprises which involvement in poaching is undermining the competitiveness of industry.

The tendency to receive access to the high-quality sources of steady competitiveness at the developed international markets forces businessmen to draw their business out of twilight. However, Russian government does not stimulate and poorly supports the process. Present measures of legal and economic influence do not promote the decrease of illegal fishing. The fishermen getting access to the national bioresources does not oblige the real responsibility to register the catch and deliver it to domestic market.

The fifth group of disbalances is the disparity between tendency to integration of Russian fishing industry into the international fish market as equal in rights affiliate and absence of effective mechanisms of the governmental protection of interests of Russian fishing companies at the international level.

#### 4.3 Competitive environment of Russian fishing industrial complex in Asia Pacific Region

In Pacific region among the closest neighbors of Russia the most attractive territory for mass production allocation is, suddenly, North Korea (Democratic People's Republic of Korea), starting with free economic zones. Bear in mind the specific relations between Russia and Democratic People's Republic of Korea the administrative and political risks are minimal. Share of salary in production expenses is about 4% to 5%. There are no restrictions for factories allocation inside the transport accessibility area, but available production capacities also not presented. Moreover, there are essential constraints for the electric power and refrigerating capacities. That means 100% investment for facility creation. Average payback period in the food-processing industry does not exceed 3 to 5 years. However, there is the strict political requirement to deliver the part of production for supply of domestic market at fixed state-regulated prices. Therefore return on investments could not exceed 15-20% annually.

China is the world largest consumer of fish goods. Domestic market consumes more than 30 million tons per year. China occupies one of the world leading places by income amount from fish goods exportation, or over 5 billions US dollars in 2008. China has the developed industrial infrastructure and skilled workforce. China has enough electric power and refrigerating capacities. Share of salary in production expenses does not exceed 8-9% in the Northeast areas and 10-12% in Southern areas. Processing of the export fish goods is supervised by business mainly from Hong Kong and Taiwan. There are no obstacles on access to the advanced technologies. Management and logistics meet the international standards. But, production certification may be difficult at the developed markets. The industry operates under the governmental control as strategically important sector of economics in the environment of rigid competition. Amount of the state subsidies is the highest in the world. Foreign companies not supervised by Chinese nationals haven't access to direct or indirect governmental subsidies. Therefore controlling stocks are usually under the control of Chinese nationals. Thus independent activity in the China is severely complicated. Possible way is to enter into the developed network and act in tolling mode with the definite amount of raw fish and definite depth of processing.

Russia demonstrates a number of comparative advantages for allocation the capacities for mass sea bioresources processing in the coastal area, especially in terms of transport availability. Limitations are: high administrative non-market expenses, shortage of refrigerating capacities, underdevelopment of logistics and informational infrastructures, absence

of open competition in stevedore service, underdevelopment of open market institutes like fish stock exchange, secondary quotas exchange, bank lending secured by bioresource quotas, and some others. Also should be noted the absence of instruments of domestic market balancing like floor prices for the raw materials, differentiated custom duties, and insurance funds. Restrictions mostly are organizational or legal and may be eliminated under the political will.

### 5. Discussion

Potentially possible monetary value of sea biological resources available in exclusive economic zone of Russia, at prices of 2010:

- During 2010-2014 3.9-4.3 bln. US dollars;
- During 2015-2020 4.7-5.2 bln. US dollars;
- After 2020 5.5-6.2 bln. US dollars.

Real cash flow for various scenarios of development of fishing industry complex of Russia, at prices of 2010:

- 1. Resource-focused scenario (primary processing) under condition of total coverage of allowed amount of catch:
  - During 2010-2014 2.6-2.7 bln. US dollars;
  - During 2015-2020 3.2-3.3 bln. US dollars;
  - After 2020 3.9-4.3 bln. US dollars.

Actual level of economic return under the achieved technological stage may be up to 66% from potentially possible.

- 2. Technologically dependent scenario (full processing, no waste) under condition of total coverage of allowed amount of catch:
  - During 2010-2014 3.3-3.5 bln. US dollars;
  - During 2014-2020 4.1-4.4 bln. US dollars;
  - After 2015 4.7-5.2 bln. US dollars.

Actual level of economic return under the achieved technological stage may be up to 87% from potentially possible.

- 3. Innovative scenario (deep processing, no waste) under condition of total coverage of allowed amount of catch:
  - During 2010-2014 3.9-4.0 bln. US dollars;
  - During 2014-2020 4.7-5.0 bln. US dollars;
  - After 2015 5.5-6.2 bln. US dollars.

Actual level of economic return under the achieved technological stage may be up to 100% from potentially possible.

Inefficient system of water bioresources utilization results in annual economic losses of the Russian fishing industry complex at average 2 bln. US dollars during 2006-2010, including:

- 480-500 mil. US dollars are in the losses connected to incomplete coverage of allowed amount of catch;
- 270-300 mil. US dollars are in incidental catch which is not processed but dumped back to the sea;
- 460-480 mil. US dollars are in the technological losses connected to the low involving of zero-waste technologies;
- 500-520 mil. US dollars are in the innovative losses connected to the absence of innovative technologies and inability to create new segments in the non-food markets;
- 120-140 mil. US dollars are in the losses connected to inefficient marketing strategy at domestic and international fish markets;
- 160-180 mil. US dollars are in the losses connected to absence of national fish brands known at the international fish market.

### 6. Conclusion

Analysis of world fishing industry shows that harvesting of mass marine bioresources is at the highest possible level now. There are no amounts not reserved by leading countries. Growth of catch may be achieved only as the result of redistribution of the national quotas between countries.

Universal approach to the best management practices in fishing industry complex is not developed yet. Russia exhibits passivity in the international process of position adjustment and coordination.

Despite the fact that there is common opinion about negative influence of federal subsidiary support on the stability



of fishing industry, subsidies are still in wide use as the instrument of regulation of fishing industry. Production power of world fishing fleet twice exceeds the highest possible biologically allowable catch amount. Russian government gives no attention to world experience and repeats the other's errors.

World prices for mariculture farm production shall grow at advanced rates compared to the prices for production of traditional fishing. Thus the conditions shall be formed for accelerated flow of the capital from traditional fishery to the farmery mariculture.

Prices at the world fish market are considerably deformed by high direct and indirect governmental subsidies. Mass sorts of fish production processed under the low-waste or zero-waste technologies are underpriced. Business is compelled to compete for governmental subsidies rather than for productivity and quality.

Level of concentration of capital is growing. Share of small business in fishery as the source of living allowance in coastal territories is reducing. Capitalization of Russian companies is very low in comparison with the leading international businesses, thus the special protective measures from buyout or takeover of Russian companies are required.

Fraction of deeply processed water bioresources does not grow in the world fish market. Leading trading companies increase the amounts of sale of fresh or live fish. Exportation of fresh or live fish is not the subject of WTO regulations. Technologies of preservation and retailing of fresh or live fish are the factor causing the growth of competitive power of coastal territories including tourism. Russian coastal territories practically do not use stated opportunity to increase own capitalization.

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