# **BRANCH-WISE ECONOMY**

DOI: 10.15838/esc/2018.1.55.3 UDC 332.1; 338.2, LBC 65.04 © Antonova N.E., Lomakina N.V.

# Natural Resource-Based Industries of the Far East: New Drivers of Development



Natal'ya E. ANTONOVA Economic Research Institute, Far Eastern Branch of RAS Khabarovsk, Russian Federation, 680042, Tikhookeanskaya Street, 153 E-mail: antne60@yandex.ru



Natal'ya V. LOMAKINA Economic Research Institute, Far Eastern Branch of RAS Khabarovsk, Russian Federation, 680042, Tikhookeanskaya Street, 153 E-mail: lomakina.eri@gmail.com

**Abstract.** The goal of the paper is to study the manifestations of institutional innovations currently being implemented within the framework of a new development model for the Far East economy in the region's natural resource-based sectors; another goal is to study the areas of Russian-Chinese cooperation, which affect the current state and prospects of development of these industries. The study is based on the theories of resource-based economy, and spatial economy, including regional economy. The main scientific problem raised in the article is at the junction of the studies related to the evaluation of public policy efficiency, system effects of resource projects and their localization at the regional level under the influence of foreign economic factors. The novelty of the research consists in the fact that it formulates and implements the research task of joint consideration of institutional innovations and external factors determining the potential for the development of natural resource sectors in the Far East; thus, the research helps obtain new scientific knowledge in the field of spatial economics. The mineral resources, fishery and forest complexes are the objects of our study; they have been chosen due to the economic value of natural

**For citation:** Antonova N.E., Lomakina N.V. Natural resource-based industries of the Far East: new drivers of development. *Economic and Social Changes: Facts, Trends, Forecast*, 2018, vol. 11, no. 1, pp. 43-56. DOI: 10.15838/esc/2018.1.55.3

resources that form the basis for these industries. The article discusses the tools and forms of state support for the new development model of the Far East and their impact on the competitiveness of the industries selected in the framework of this model; the paper also analyzes how the economic agents working in these industries actually react to the preferential innovations. We show that the institutional decisions adopted in accordance with the new development model of the Far East begin to produce tangible results in the territories of the region. We consider new directions, mechanisms and forms of participation of Chinese state-owned and private business in the mineral raw materials, fishery, and forest complexes, and also the consequences of this participation both for the sectors themselves and for the economy of the Far East. The prospects for further research are associated with the task of measuring the positive and negative effects of the implementation of federal institutional tools of the new development model of the Far East for the economy of specific territories in the natural resource-based industries.

**Key words:** mineral resource complex, fishery complex, forest complex, Far East, institutional changes, Russian-Chinese cooperation.

#### Introduction

The fundamental constants for a long period of development of the Far East are as follows: natural resources as the basis of the regional economy, active participation of the state in regional development, and the focus on cooperation with neighboring Pacific countries and markets [1]. Within the framework of these economic constants it is possible to give a systematic assessment of the results and prospects of development of natural resource industries in the region. This approach is due to the fact that the natural resource potential and related activities are elements of both the natural and socio-economic system [2]. The changes taking place in the socio-economic system are reflected both in the current indicators of the natural resource sectors and in the long-term processes of environmental management.

Natural resources and their use (in the Far East of Russia, too), taking into account the influence of state participation and the external factor, have been the object of scientific interest of scientists and specialists for many years. Assessing natural resources, the sustainability of their use, and the role of the government in these processes are studied in many works [2; 3; 4; 5; 6; 7]. Regional studies in the field of natural resource management address the use

of certain types of resources and the impact of public policies on it [8; 9; 10; 11; 12; 13; 14; 15], and the specifics of nature use in the regions bordering on China and experiencing an impact of such neighborhood [16].

The problems of environmental management through the prism of East Asian and Chinese influence are given much attention in the works of Far Eastern scientists. Environmental management systems in the Far East and in North-East Asia in the dynamics of the transformation of natural resource potential [2;17], the condition of the natural resource potential of the Far East in the Asia-Pacific Region in the long term [18], various aspects of possible interaction of the border economic systems of Russia and China, the functioning of certain segments of the resource sector under the influence of external demand [10; 19; 20] are the subjects of comparative studies.

The present paper considers three key natural resource sectors of the Far Eastern Federal District (FEFD)<sup>1</sup>: mineral resources,

<sup>&</sup>lt;sup>1</sup> The terms "Far East", "Far Eastern Federal District" are used as synonyms in this article. The Far Eastern Federal District consists of nine constituent entities of the Russian Federation: Khabarovsk, Primorsky and Kamchatka krais; the Amur, Magadan and Sakhalin regions, the Republic of Sakha (Yakutia), the Jewish Autonomous Oblast, and Chukotka Autonomous Okrug.

fisheries industry and forestry. The natural resources of the Far East, which form the raw material basis of these industries, have been and remain Russia's "resource depository" in their reserves.

Thus, as of 2015, the Far Eastern Federal District possesses almost all Russian national reserves and almost 100% of diamond production, almost 100% of tin production and 92% of its reserves, about 45% of gold production and 33% of its reserves, 65% of silver production and 35% of its reserves, almost 80% of tungsten concentrate production and about 23% of its reserves, 100% of antimony production and 50% of its reserves [3]. Under all transformations of the reformation period, the role of the mineral resource complex of the Far East in the national economy only increased: the share of mining in the Far Eastern Federal District, except for fuel and energy, in the structure of the national industry increased from 11.8% in 1990 to 44.8% in 2016.

The resource potential of water and biological resources in the national exclusive economic zone in the Pacific basin is three million tons; in addition, Russia engages in industrial marine fishing in the ocean. The potential of aquaculture in the Far East is one million tons of finished products. The fishery complex in FEFD stably provides more than 60% of the total volume of harvesting of water biological resources in Russia and 58% of tax revenues to the budgets of all levels from the fishing complex of the country [3].

The Far East has the largest forest resources in the country: 295.2 million hectares are covered by forest (37% of the same figure for Russia). The wood reserve in FEFD is estimated at 20.5 billion m³ or 24.8% of the total Russian reserves. However, the use of forest resources, unlike mineral and water-biological resources, is extremely low: out of 92 million m³ of the estimated cutting area (annually permissible amount of logging) less than 20% is harvested,

which does not correspond to the available resource potential. The reasons for this situation are the territorial inconsistency of the resource base and the zones of industrial harvesting and processing of wood, as well as the fall in demand for Russian timber in foreign markets [19].

Natural resources continue to be the basis of the economy in the Far East, which retains its raw materials orientation and focus on foreign markets. From the position of two other groups of fundamental factors in the development of the Far East – state participation and focus on external cooperation – in the last five years (2013–2017), their significant enhancement is noted. Thus, since 2013, a "new model" of development with a whole set of special institutional and economic regimes has been announced for the region at the level of the federal center. As for the orientation of economic cooperation of the region to the countries in APR, during the period under review it continues to "shift" toward China, which is determined by the general intensification of Russian-Chinese cooperation at the state level that receives additional stimulation since 2014. In fact, these changes become new factors in the development of the Far East and, of course, influence the development of basic sectors of the economy of the region, such as natural resource industries.

What is the current situation in key natural resources sectors? Does the target area of the "new model" of the Far East development include the support and stimulation of natural resource industries; what is the actual reaction to preferential innovations and the competitiveness of resource industries under this model? What are the new directions, mechanisms and forms of participation of Chinese business (public and private) in the resource sectors of the Far East? The goal of the present article is to find answers to these questions. The novelty of the research consists in the theoretical formulation and practical implementation of the research task of

joint consideration of institutional innovations and the external factor determining the potential for the development of natural resource sectors in the Far East, which ensures the increment of scientific knowledge in the field of spatial economics.

### Research methodology and methods

The research is based on the theories of resource economy, spatial economy (including regional economy), and institutional economy. To implement the task of identifying the impact of institutional factors on the development of natural resource industries, a comparative statistical analysis of changes in the development indicators of these industries is used, which allows us to identify the changes taking place in them. On the basis of a system approach, we consider new forms and directions in trade and investment cooperation between Russia and China in the natural resource sectors in the Far East, which are under the influence of economic and institutional changes in the bilateral cooperation.

The information base of the research was made up of normative legal acts of the federal and regional levels, adopted in the last five years in the field of regulating the development of the Far-Eastern economy; statistical and analytical information from the websites of federal and regional authorities, containing the results of implementation of regional development tools; and analytical reviews of relevant domestic and foreign Internet publications.

#### Results of the study and their analysis

New development institutions and natural resource sectors of the Far East. New institutions for the development of the economy of the Far East are formed by a number of legislative, organizational and infrastructural innovations. In 2014–2017, twenty-two federal laws<sup>2</sup>

containing legal aspects to create an institutional environment for the formation of a new model for the development of the Far-Eastern economy were adopted. This model is implemented by adding sections dedicated specifically to the Far Eastern Federal District to the sectoral state programs and sectoral strategies. That is, there is a division of responsibility between all federal ministries for the implementation of new tools under the general supervision of the Ministry for the Development of the Russian Far East.

The basic laws are as follows: "About the territories of advanced socio-economic development" (TAD) and "About the free port of Vladivostok" (FPV), which formed the basis for the formation of new instruments of modern state policy with regard to the Far East<sup>3</sup>. These tools include: priority connection of TAD to the objects of infrastructure at the expense of budget funds; establishment of preferential rates of rent payment for land use; preferential taxation of residents in TAD; reducing the administrative burden; the use of free customs zone procedures; preferential amount of insurance contributions to the payroll; accelerated procedures for obtaining a construction permit. At the end of 2017, eighteen TADs were created in eight regions (except the Magadan Oblast).

The *Table* provides information about investment projects in natural resources sectors, the initiators of which are registered as residents of the territories of socio-economic development. It is interesting to analyze what activities carried out in the natural resource sector (reproduction of the resource base, extraction of raw materials and their processing) are

<sup>&</sup>lt;sup>2</sup> By the end of the year, 86 new enterprises will be operating in the Far East. Available at: https://minvr.ru/press-center/news/10681/?sphrase\_id=211593 (accessed: 28.11.2017).

<sup>&</sup>lt;sup>3</sup> About the territories of advancing socio-economic development in the Russian Federation: Federal Law No. 473-FZ of December 29, 2014 (as amended on July 3, 2016) (with amendments and additions entering into force on January 1, 2017); About the free port of Vladivostok: Federal Law No. 212-FZ of July 13, 2015; state program of the Russian Federation "Socio-economic development of the Far East and the Baikal region": approved by the Resolution of the Government of the Russian Federation No. 308 dated April 15, 2014.

Investment projects implemented in natural resources sectors within the framework of TAD

TAD, constituent entity of the Russian Federation	Investment project, initiator	Specialization
	Fishery complex	
"Kamchatka", Kamchatka Krai	Shore base for processing marine biological resources, V.I. Lenin fishing farm Fish processing complex, 000 Gorod 415 and Korea Trading & Industries co., LTD Fish processing plant, fresh-water trout farm, 000 Rybnaya Dolina	Fish processing, reproduction o resource base New construction
"Beringovsky", Chukotka Autonomous Okrug	Plant for processing fish resources of inland waters, OOO Chukotrybpromkhoz	Fish processing Modernization
"Kangalassy", Republic of Sakha (Yakutia)	Commercial farming of the sturgeon, 000 NPO EKOR	Reproduction of resource base New construction
"Komsomolsk", Khabarovsk Krai	Fish processing production, construction of new capacities, 000 Torgovy Dom "Yukon"	Fish processing Modernization
"Nikolaevsk", Khabarovsk Krai	Plant for the production of canned salmon and waste recycling, 000 Eastern fish processing plant	Fish processing Modernization
	Forest complex	
"Komsomolsk", Khabarovsk Krai	Far Eastern Center for Deep Wood Processing, Amur Timber Company, and Amur Industrial Center (all owned by RFP Group)	Timber processing New construction
"Amuro-Khinganskaya", Jewish Autonomous Oblast	Deep wood processing complex, Chinese company LLC Amurprom	Timber processing New construction
"Komsomolsk", Khabarovsk Krai	Pulp and paper mill, 000 Novaya Russkaya tsellyuloza	Timber processing New construction
	Mineral resource complex (except fuel and energy resources)	
"Beringovsky",	000 Vostok	Extraction of precious metals
Chukotka Autonomous Okrug Zhilnoye gold and silver deposit, Kanchalano-Amguemskaya Square LLC Ruchei Sukhoi deposit, OOO INTEKhKOMS OOO Bering Zoloto OOO Rudnik Valunistyi OAO S/A Sever	Geological exploration, production New construction	
	Mining of placer gold Modernization	
	Gold mining	
	Gold mining	
	Extraction of precious metals	
"Amuro-Khinganskaya", Jewish Autonomous Oblast	Mining and processing integrated plant on the basis of Soyuznoye graphite deposit, 000 Dalgraphite	Mining and dressing New construction

http://erdc.ru/upload/reestr-tor.pdf (accessed: 30.11.2017)

supported in the framework of TAD. In addition, it is interesting to find out what investments are aimed at: at new construction or at the modernization of existing production; that is, whether the expanded reproduction is carried out within the new model of economic development or is it maintaining the existing level?

In the fisheries sector there are projects for the reproduction of fish stocks, and this is usually a new construction, and fish processing is carried out within the framework of modernization. In the forest complex, all wood processing projects are implemented as part of the new construction. In the mineral resource complex, all declared projects are focused on the extraction of raw materials (mainly precious metals).

The institutional mechanism "free port of Vladivostok" similar to TAD on the proposed system of benefits is also attractive for investors, despite the fact that it lacks such an important

tool as financing the construction of infrastructure objects at the expense of budget funds.

Within the framework of FPV, 13 fishing enterprises have been registered, whose activities are aimed at reproduction of fish stocks in freshwater and marine waters, sea farming, pasture fishing, processing of fish and other aquatic organisms, and logistics of fish products<sup>4</sup>. Ten timber enterprises located mainly in Primorsky Krai were registered by the residents of FPV. These are medium-sized newly created enterprises, whose main activity is wood processing.

In the Far East, it is also planned to introduce quotas on exports of unprocessed timber at reduced customs duties (from 25 to 6.5%)<sup>5</sup>, a tool that combines sectoral and regional approaches. An enterprise can obtain such a quota provided that it processes at least 20% of harvested wood, with its subsequent increase to 35%. The total quota will amount to 4 mln m<sup>3</sup> of timber exports from the Far East; that is, the sales abroad at reduced duties will cover 60% of unprocessed timber. Outside the export quota, the customs rate on timber will remain at 25%, with a possible subsequent increase of up to 40% or more<sup>6</sup>.

It can be concluded that governmental policy in the forest sector aimed to support primarily large companies contributes to changing its "size" structure by reducing the number of small enterprises and increasing the share of large ones. Also there is an intraindustrial redistribution of logging and wood processing segments in favor of the latter. This confirms a well-known thesis that the market structure is

The issues dealing with the formation of added value are also relevant for the mineral sector of the Far Eastern economy. However, if before 2013, traditional tasks of state programs and federal target programs were formulated as follows "modernization of the resource sector", "increasing the complexity of raw materials processing" against the background of the original assumption that the region cannot compete with the APR countries for the production of high-tech industries, then the target task of the region's development in the logic of the "new model" of 2013 was formulated in a different way: "The Far East should become a competitive region with a diversified economy, whose structure is dominated by high-tech production with high added value"7. In fact, this implies abandoning the raw materials economy as a major type of development of the region and "pushing" the mineral sector of the Far East out of the "field" of special state support. What is the situation today? Do investment projects in the mineral sector implemented in the Far Eastern Federal District enjoy any preferences within the framework of the "new model"?

Preferential measures for mineral resource projects aimed to expand the mineral resource base (MRB) and search for new deposits that can ensure the dynamic development of the mineral sector of the region in the future were already provided in the "first package" of the announced "new model". First of all, we speak about the introduction of a reduction factor

largely formed under the influence of economic policy of the government (subsidies, tax incentives, leasing of land) [21].

<sup>&</sup>lt;sup>4</sup> Register of residents of the free port of Vladivostok. Available at: http://erdc.ru/upload/reestr-spv.pdf (accessed: 30.11.2017).

<sup>&</sup>lt;sup>5</sup> Quota for the export of wood from the Far East will be tied to investments in processing. Available at: https://minvr.ru/press-center/news/10811/?sphrase\_id=211586 (accessed: 02.12.2017)

<sup>&</sup>lt;sup>6</sup> The forest bends under the quota. *Kommersant Newspaper*, 2017, September 6. Available at: https://www.kommersant.ru/doc/3403041 (accessed: 02.10.2017).

<sup>&</sup>lt;sup>7</sup> State program of the Russian Federation "Social and economic development of the Far East and Baikal region": approved by the Resolution of the Government of the Russian Federation No. 466-r dated March 29, 2013.

<sup>&</sup>lt;sup>8</sup> On amendments to parts one and two of the Tax Code of the Russian Federation in terms of stimulating the implementation of regional investment projects on the territories of the Far Eastern Federal District and certain constituent entities of the Russian Federation: Federal law 267-FZ of September 30, 2013.

for mineral extraction tax (MET) for 10 years: from 0 in the first two years to 0.8 in the last two years of ten-year tax holidays (with a step of 0.2 every two years). In this regard, a new category of taxpayers who could use such privileges — "a participant of the regional investment project" – was introduced. Obtaining such status required compliance with certain conditions (registration in the territory of the subject of the Russian Federation; absence of separate subdivisions in other territories; a certain organizational and legal form, etc.) and registration with a special Register. At this stage, only a small number of companies that implement investment projects at the gold deposits of the Far East – Ozernovskoye and Ametistovoye in Kamchatka, Svetloye<sup>9</sup> in Khabarovsk Krai, and some others — were able to enter the Register.

The impact of this incentive mechanism in the first phase of introduction of tax incentives was very limited. In our opinion, the reason lies not at all in the difficulties with "entering" the Regional Investment Projects Register. Given the fact that almost the entire effective mineral resource base in the region is distributed among subsoil users, mainly large companies, the chances of new players and the possibility of their registration as a special category of taxpayers are very small. In fact, there were no new participants to enter the Register. At the same time, the investment community in the mineral resources sector began to raise questions about clarifying the criteria for compliance of the new category of taxpayers and inclusion of "investors who began to implement their projects in the period immediately preceding the

entry of the Law into force (January 1, 2014)" in this category [22].

In 2016, certain changes were made to the procedure for the formation of regional investment projects, and the result exceeded all expectations. Now, any investor who implements a project in FEFD (outside TAD and FPV) with a total investment of over 50 million rubles for three years may receive preferential treatment, including the mineral extraction tax privilege. This takes into account investments made since January 1, 2013. The declarative principle of obtaining tax privileges is introduced<sup>10</sup>. With such quantitative criteria for entering the regional investment projects, almost any mineral resource project becomes such automatically. However, in our view, the question of whether such an approach could stimulate the expanded reproduction of the mineral resource base in the Far Eastern Federal District remains open.

No less important mechanism of the "new model" of the region's development is state support for investment projects, the practical implementation of which can produce a significant effect for the Far East. To date, this procedure has not only been worked out legally<sup>11</sup>, but it has already produced its first results. In 2015–2017, several stages of selection of investment projects for direct state support in the form of subsidies for the creation and reconstruction of infrastructure in the framework of investment projects were implemented<sup>12</sup>.

<sup>&</sup>lt;sup>9</sup> According to the estimated made by V. Neses, Head of the company Polymetall, the development of Svetloye is a low-cost project and a backup in case of depletion of the resource base... The company was going to develop Svetloye in any case. Support measures will reduce the tax burden of Svetloye in three times. Cit. ex.: Pasmurtsev V. Svetloye was given the "green light". The company Polymetall will receive benefits under the law on greenfields. *Kommersant Newspaper (Khabarovsk)*, 2015, no. 130, July 23. Available at: https://www.kommersant.ru/doc/2773520 (accessed: 14.12.2017).

<sup>&</sup>lt;sup>10</sup> Aleksandr Galushka: tax concessions will be granted to all investors in the Far East. June 2, 2016. Available at: https://minvr.ru/press-center/news/2133/?sphrase\_id=223038 (accessed: 13.12.2017)

<sup>&</sup>lt;sup>11</sup> On approving the technique for selecting investment projects planned to be implemented in the territories of the Far East and Baikal region: Resolution of the RF Government No. 1055 dated October 16, 2014; On amending the the technique for selecting investment projects planned to be implemented in the territories of the Far East and Baikal region: Resolution of the RF Government No. 503 dated April 28, 2017.

<sup>&</sup>lt;sup>12</sup> Resolution of the RF Government No. 484-r dated March 23, 2015; Resolution of the RF Government No. 1339-r dated July 13, 2015; Resolution of the RF Government No. 1806-r dated August 27, 2016.

In the course of the selection, more than fifty projects in various sectors were considered and to date, 13 investment projects have been selected for state support. The maximum total amount of subsidies that the investors in the Far East can obtain is defined in the amount of 34 billion rubles, including in 2017 - 6.8 billion rubles, in 2018 - 4.8 billion rubles, in 2019 - 5.6 billion rubles<sup>13</sup>.

The mechanism of direct state support for investment projects aimed to solve infrastructure problems is of a general nature and is not designed specifically to deal with mineral resource projects. It can be assumed that it could "work" toward the formation of a new sectoral structure in the Far Eastern region. However, in fact, nine of the 13 selected projects are expected to be implemented in the resource sector: eight projects in mining, and one – in wood processing. In general, the estimated support of resource projects is expected to be at the level of 90% of all budget funds allocated for these purposes (30.3 out of 34 billion rubles). That is, de facto mineral projects are still recognized as corresponding to the strategic development goals of the region and competitive for both private investors and the government.

The Chinese factor. China is a major partner for Russia's Far East in trade and investment cooperation, and this role has grown in recent years, especially in the natural resource sectors. The share of production of the natural resource sectors in the Russian Far East exports to China is almost 80% in recent years. In 2016, the main exports to China included minerals (32.8% of total Far Eastern exports), fish and seafood (26.1%), timber and timber products (19.2%)<sup>14</sup>. Chinese investors are also active in new forms of investment development of the Far

Eastern Federal District: of the total amount of foreign investments declared for 2016 in projects implemented in the framework of TAD and FPV, China accounts for 88.4 and 99%, respectively.

As mentioned above, the natural resource industries of the Far Eastern Federal District are focused on the export of their products to varying degrees.

Fifty percent of the total production of aquatic biological resources is exported. Almost all goes to China, the Republic of Korea and, to a lesser proportion, in Japan. According to the Federal Customs Service<sup>15</sup>, in 2013–2016, China increased its share in the physical volumes of Far Eastern exports of fish and other aquatic products from 59 to 63% (from 798.6 to 804.9 thousand tons), and its share increased to 70.7% in the first half of 2017. In value terms, this figure is lower, since China mainly specializes in the import of fish, rather than expensive crustaceans and molluscs: in the structure of Far Eastern supplies of aquatic biological resources to China, the share of frozen fish is more than 90%. The main imported fish species is Alaska Pollock: in recent years, from 75 to 82% goes from the Far East to China.

The exported Russian fish, first of all, Alaska pollock, in border areas of China goes to fish processing enterprises that create employment for local population. In the border province of Jilin (county-level city of Hunchun) there are 54 fish processing enterprises, and it is planned to create 25–30 new ones. The volume of fish processing in this area grew from one up to nine billion yuan in 2014–2016<sup>16</sup>.

Taking into account the fact that frozen fish after its processing in Chinese enterprises is exported in significant volumes, it can be

<sup>&</sup>lt;sup>13</sup> Resolution of the RF Government No. 718-r dated April 17, 2017. Available at: http://government.ru/docs/27317/ (accessed: 13.12.2017)

<sup>&</sup>lt;sup>14</sup> Russian-Chinese dialogue: Model 2017: report no. 33/2017. Available at: http://russiancouncil.ru/papers/Russia-China-Report33.pdf (accessed: 30.11.2017).

<sup>&</sup>lt;sup>15</sup> Foreign trade of the Far East. Far Eastern Customs Administration of the Federal Customs Service of Russia. 2017. Available at: http://dvtu.customs.ru/index.php (accessed: 20.11.2017).

<sup>&</sup>lt;sup>16</sup> Fish shores. *Russian newspaper "Economy of the Far East"*, 2016, no. 7033 (165), July 27. Available at: https://rg.ru/gazeta/dfo/2016/07/28.html (accessed: 30.11.2017).

concluded that China is interested in maintaining the raw materials orientation of the Far Eastern export of fish products.

The forest complex of the Far East supplies timber products to foreign markets by 90%. Its main market is China, whose role in the geographical structure of supplies began to increase from the beginning of the 2000s, sharply increased in the late 2000s—early 2010s (after Russia raised export duties on unprocessed timber), and retains its leading position at the moment.

The opportunities to increase Russian timber exports to China have increased recently, due to China's ban on commercial harvesting of timber in natural forests across the country since 2016, in order to restore forest cover damaged by extensive felling in the 1990s and 2000s. As a result, the country began to reduce its production of wood, which is planned to compensate for through its imports.

Russia, despite the decline in exports, remains in the group of the main suppliers of raw wood to China, and is also a leader in the supply of unprocessed timber: in the first half of 2017, its share in this market reached 46% compared to 33% in 2013 [23].

China is practically a monopsonist for the Far East: from 2013 to 2016, its share in the total value of exports of timber and its products increased from 72.6 to 81.7%<sup>17</sup>. According to the product structure, raw wood remains dominant and accounts for 67.6% of the total value of timber products supplies. This means that despite the policy aimed to change the commodity structure in favor of products with high added value, the policy that the federal center has been pursuing for more than 10 years, the forest complex of the region retains its raw materials orientation. The main product of wood

processing — sawn timber, the volume of which it was managed to increase over the past ten years — is also a product of low processing, a semi-finished product, which Chinese woodworking enterprises turn into the final product.

Such a close link determines the dependence of demand for forest products and their prices on a single consumer, making the financial and economic situation of enterprises unstable. The fall in timber products prices in the Chinese market in 2012–2014, which negatively affected the already unstable financial and economic indicators of the forest complex of the Far East, confirms this thesis.

Investment cooperation between the Far East and China in the use of forest resources in recent years has begun to move gradually from the stage of intentions to the stage of real investment. This was facilitated by the creation of new forms of state policy for the development of the Far East. So far, these investments are sporadic and they are carried out in the projects with a high share of state support. A real example is the accession of the Russia-China Investment Fund<sup>18</sup> in the share capital of RFP Group, the largest timber company in the Far East. The involvement of a large Chinese company in the project guaranteed sales and possible preferences in comparison with other suppliers to the Chinese market<sup>19</sup>. It should be noted that attracting Chinese investments was facilitated by the fact that RFP Group enjoys many types of state support.

The mineral resource complex of the Far East is also becoming an area in which Russian-Chinese cooperation is intensifying. Already in the early 2000s, it was clear that such cooperation had an objective basis and was supported by certain institutional solutions, especially on the part of China. It was during

<sup>&</sup>lt;sup>17</sup> Foreign trade of the Far East. Far Eastern Customs Administration of the Federal Customs Service of Russia. 2017. Available at: http://dvtu.customs.ru/index.php (accessed: 30.11.2017).

<sup>&</sup>lt;sup>18</sup> The Russia-China Investment Fund was created by the Russian Direct Investment Fund and China Investment Corporation (CIC)

<sup>&</sup>lt;sup>19</sup> RFP Group. Website of the Russian Direct Investment Fund. Available at: https://rdif.ru/Portfolio/5/ (accessed: 14.12.2017).

that period, in order to provide its economy with natural resources, China adopted a "borderless business" strategy, according to which it prefers to deal directly with the sources of raw materials rather than rely on the world market. Chinese companies were allowed to invest directly in the development of foreign producers in order to ensure the supply of necessary raw materials. At the same time, more than 50% of Chinese foreign investments were made in the mining industry of different countries. In the context of the implementation of such a policy, on the one hand, and the commodity nature of the development of the mineral sector of the Far East, on the other hand, China was seen as the most active partner in integration interactions in this sector of the Far East [24].

To date, in the mineral sector of the Far East, there are several joint Russian-Chinese projects at different stages of their implementation (from intentions to implementation) [10, 15, 16]. The ongoing projects include the participation of LLC Mining company Tonhua Mingbang (China) in the long-term program (2012–2021) of geological exploration of mineral resources in the Magadan Oblast (with total cost about three billion rubles) and the construction of Kimkano-Sutarsky mining and processing plant in the Jewish Autonomous Oblast.

The last project can be considered as an example of implementation of a new stage of China's mineral policy, the targets of which have undergone some significant changes<sup>20</sup>. In fact, the new models of cooperation recommended by the Directive document of the State Council of China, such as "a contract for the construction of an object + funding + operation", in the case of the development of iron ore deposits in the

Jewish Autonomous Oblast, are already being tested<sup>21</sup>.

If we evaluate the overall conditions for entering the mineral sector, the Chinese consider the following ones to be ideal: "obtaining the assets in full ownership or possessing at least 51%; ensuring the rights to the full or at least a 50% export of raw materials for further processing in their territory; manning of Russian-Chinese enterprises by Chinese labor force; using Chinese machinery and mining equipment in the extraction process"<sup>22</sup>.

This approach was demonstrated, for example, during the negotiations in 2015 on the development of the Natalka Deposit on the Kolyma (with the reserves of 16 million ounces of gold). The Chinese side — China Gold company — presented itself as "a strategic player looking for control in the capital and in management". After that, the negotiations on the project went no further<sup>23</sup>. The key tasks in China's modern mineral policy are export of Chinese technologies and equipment for exploration and mining, creation of the relevant production facilities and zones abroad.

The mineral sector of the Far East is becoming an increasingly important platform for Russian-Chinese cooperation. Thus, in 2017, the Far East and Baikal Region Development Fund (FEDF) and the private Chinese holding Metropoly signed memorandums on the creation of two investment funds – for investing in mining, and for investing in infrastructure and construction. The target amount of the funds in 2017 will be one billion US dollars each. The share of FEDF

<sup>&</sup>lt;sup>20</sup> One of the key documents defining the new tasks is the Directive of the State Council of May 16, 2015 "Guidelines of the State Council on the promotion of cooperation with foreign countries in the field of production capacity and production of equipment". Available at: http://ru.chhimg.com/article/27004. Issued May 18, 2015. (accessed: 05.04.2016).

<sup>&</sup>lt;sup>21</sup> These issues are considered in detail in [10].

<sup>&</sup>lt;sup>22</sup> "An Expert: we hope that the pit of 2014 in the gold market will be replaced by the bull of 2015". September 9, 2014. Available at: https://www.1prime.ru/experts/20141209/797619443-print.html. (accessed: 05.04.2016.)

<sup>&</sup>lt;sup>23</sup> Dzumaylo A. "Russian platinum" with a Chinese accent. *Newspaper "Kommersant"*, 2017, no. 146, August 11, p. 7. Available at: https://www.kommersant.ru/doc/3380368 (accessed: 11.08.2017).

is 10%, of partners from Asia — up to 80%, Russian investors are going to invest about 10%. Potential investment objects include 15 projects in gold mining with resources of 1.5 thousand tons of gold, two largest copper and gold projects of the Far East, and a number of other mineral projects<sup>24</sup>.

All these examples show that Russian-Chinese cooperation in the natural resource sector in the Far East is "gaining momentum". And the question of what such cooperation brings — problems or opportunities, has not ceased to be relevant.

#### Discussion of the results

The study of the impact of new factors in the development of the Far East on the natural resource sectors of the region, of course, raises several discussion issues.

First of all, it is important to assess the consequences of the use of new instruments of state support in the Far East — both for the economic agents themselves operating in the natural resource sectors, and for the economy of the region.

Considering the use of an industry tool in the form of quotas for the export of raw wood from the Far East at reduced customs duties, it should be understood that the easing of the customs regime will extend mainly to large companies that have either already created or are in the stage of completing the creation of processing capacities. Small and medium-sized enterprises focused on the export of timber are unlikely to be able to take advantage of this privilege, so when restrictive duties are imposed, they will have to redirect the flow of wood to domestic consumers or leave the market. But will the processing production capacities be established in the Far Eastern Federal District in quantities equivalent to the harvested timber? A positive answer is possible if a project for construction of a pulp and paper mill will be implemented in the region; the mill will require about five mln m<sup>3</sup> of wood raw material, and this issue remains open.

Such regional tools of the new model of the Far East economy development (preferences in the framework of TAD and FPV, investment projects) are also used skillfully by large companies, which, as a rule, already have preferences from the government. For example, the forestry holding company RFP Group actively cooperates with federal and regional authorities in an effort to participate in all of the developed strategic documents of sectoral and territorial development. The investment project implemented by the company already has various federal privileges and receives additional preferences in the framework of TAD. And this occurs not only in the forest complex.

The question arises: what is the impact of all these preferences? Are there guarantees that the projects will be implemented by companies, and what will the people and the economy of the Far East get from their implementation? For example, in the framework of subsidies for timber enterprises of the Far East, almost two billion rubles<sup>25</sup> was paid in 2016 from the federal budget, while the amount of tax payments received in the consolidated budget of the Russian Federation in the same year amounted to only one billion rubles<sup>26</sup>. So far, the questions remain open.

Similar questions arise with regard to the mineral resource complex. In our view, the contradictory situation of direct budget support to mineral projects with the declared goal of abandoning the commodity economy is due to the application of assessment criteria and

<sup>&</sup>lt;sup>24</sup> Metalinfo.ru. 2017. No. 2134211. March 31. Available at: http://www.dalvest.polpred.com/?cnt=195&fo=7%3Fcnt%3D79&ns=1&sector=5&page=2. (accessed 16.08.2017).

<sup>&</sup>lt;sup>25</sup> Report on the goals and objectives of the Ministry of Industry and Trade for the year 2017 and the main performance results for the year 2016. Available at: http://minpromtorg.gov.ru (accessed: 02.08,2017).

<sup>&</sup>lt;sup>26</sup> Data on the forms of statistical tax reporting for 2016. Federal Tax Service. Available at: https://www.nalog.ru/rn77/related\_activities/statistics\_and\_analytics/forms/ (accessed: 01.12.2017).

indicators chosen by the management elite. Focusing on a non-measurable criterion of "compliance with the goals of strategic documents" and on a measurable indicator "the ratio of private investment to budget funds" will ensure the "victory" of resource projects (especially capital-intensive mineral resources) in the struggle for public funds for a long time.

It seems that there were certain developments in the logic of "improving" the tools to support investment projects that are not part of TAD and FPV, through "liberalization" and simplification of approaches to preferential treatment of regional investment projects. It is established that "... a fundamentally new model is introduced: the investor receives a benefit in the declarative order, after reaching a certain level of investment in the project, the benefit emerges upon investment by giving a notice. Thus, the law is able to increase the number of participants of regional investment projects"27. In fact, the "increase in the number of participants" becomes an effectiveness criterion for preferential treatment. But the incentives for expanded reproduction of small and medium business and for the development of regions, in our opinion, are only decreasing. The expectations of "tomorrow's happiness" and today's losses of budgets in the regions with mineral-raw-material specialization are already part of the conflict.

The "new model" of the Far East development formed at the federal level and the institutional decisions taken in this regard have created a situation when definite action is required at the regional level of government. The established institutions and mechanisms have been "launched", and the economic systems of the territories are beginning to produce real results based on the decisions taken at the federal level. The urgent task is to "catch" and measure

all the effects (positive and negative) from the implementation of federal institutional solutions and tools of the "new model" of development of the Far East so as to apply the results to the economy of specific regions (on the example of resource projects).

The main scientific problem is at the intersection of several research areas, such as assessing the following aspects: governmental policy effectiveness, the role of natural resources in economic development, system-wide effects of resource projects and their localization at the regional level, "institutional externalities" and their internalization for different levels of public administration.

As for the "Chinese factor" in the development of the natural resource industries of the Far East, we can say that the proximity to China, on the one hand, allowed the natural resource industries to survive during the crisis by exporting their products, but, on the other hand, it also supports their raw materials orientation. For example, currently the Far East lacks the capacities for the production of fish products of deep processing, so the export of frozen fish to China is an optimal solution for the use of extracted resources in the current situation. The problem consists in the necessity to reduce raw material dependence on the Chinese consumer; the solution requires investing the money earned from export of raw resources in the own processing rather than in further expansion of the resource base, the available resources of which are close to depletion in the natural resource sectors of the Far Eastern Federal District [3].

Exporting raw materials instead of exporting the products of their processing leads to lower rates of economic growth, and this is a common problem for developing countries rich in natural resources (the so-called Dutch disease [7]). Russia and especially the Far East, with its geographical proximity to China, the world's largest consumer of basic raw materials, are

<sup>&</sup>lt;sup>27</sup> New tax incentives were approved for investors in the Far East. Available at: https://www.newsvl.ru/far\_east/2016/05/24/147716/ (accessed: 13.12.2017).

constantly tempted to receive "easy" money from the sales of available natural resources. But we must bear in mind that Russia's resource-based economy is too susceptible to changes in foreign economic and foreign policy factors<sup>28</sup>. Therefore, it seems that there is no alternative to the diversification of production of natural resource industries in the region.

As for the "balancing" of gains and losses of Russian-Chinese cooperation, such issues, only at the country level, were raised in a new World Bank report "A Rebalancing China and Resurging India: How Will the Pendulum Swing for Russia?" According to experts, "the likely changes in China's economy...will bring problems rather than opportunities for Russia". At the same time, at the national level (to form GDP), the problems will be much more important than at the level of households: "The decline in demand for raw materials in

China could indirectly lead to a sharp decline in well-being and reduce the savings of Russian households throughout the country". The study indicated a positive opportunity of significant increase in foreign direct investment: "...It is especially true for the regions of the Russian Far East" But is it the raw materials sectors that should receive Chinese investments in the Russian Far East? Studies [25] show that, despite their importance in the regional economy, resource-based industries create a small number of "paths" and links that diversify and "fasten" the regional economy.

The research presented in the article addresses the scientific problem of assessing the positive and negative effects of implementation of institutional tools of state support for the development of resource-based regions, which determines its contribution to the development of theoretical and applied science.

#### References

- 1. Minakir P.A. *Ekonomika regionov: Dal'nii Vostok* [Regional economy: the Far East]. Moscow: Ekonomika, 2006. 848 p.
- 2. Sheingauz A.S. (Ed.). *Prirodopol'zovanie Dal'nego Vostoka Rossii i Severo-Vostochnoi Azii: potentsial integratsii i ustoichivogo razvitiya* [Environmental management in the Russian Far East and in North-East Asia: potential for integration and sustainable development]. Vladivostok-Khabarovsk: DVO RAN, 2005. 528 p.
- 3. Minakir P.A. (Ed.). *Rossiiskii Dal'nii Vostok na puti v budushchee* [Russian Far East on the way to the future]. Khabarovsk: IEI DVO RAN, 2017. 395 p.
- 4. Auty R. Natural resources, the state and development strategy. *Journal of International Development*, 1997, vol. 9, pp. 651-663.
- 5. Gylfason T., Herbertsson T., Zoega G.A. Mixed blessing: natural resources and economic growth. *Macroeconomic Dynamics*, 1999, June 3, pp. 204-225.
- 6. Matsuyama K. Agricultural productivity, comparative advantage and economic growth. *Journal of Economic Theory*, 1992, vol. 58, no. 2, pp. 317-334.
- 7. Sachs J.D., Warner A.M. *Natural Resources Abundance and Economic Growth. NBER Working Paper.* 1995. No. 5598. 54 p. Available at: http://www.nber.org/papers/w5398.pdf
- 8. Blam Yu.Sh., Babenko T.I., Mashkina L.V., Ermolaev O.V. Economic impacts of governmental regulation in the forestry. *Region: ekonomika i sotsiologiya=Region: Economics and Sociology*, 2011, no. 2, pp. 211-222. (In Russian).
- 9. Volkov L.V. Institutional aspects of the fishing industry development in the Russian Far East. *Regionalistika=Regionalistics*, 2016, vol. 3, no. 6, pp. 56-68. Available at: http://regionalistica.org/images/2016-06. pdf#page=56. (In Russian).

<sup>&</sup>lt;sup>28</sup> Resource regions of Russia in the "new reality". Novosibirsk: Izd-vo IEOPP SO RAN, 2017, 308 p.

<sup>&</sup>lt;sup>29</sup> South-Eastern opportunities. Apurva Sanghi, the World Bank's Lead Economist for the Russian Federation speaks about Asian trends. November 27, 2017. Available at: https://www.kommersant.ru/doc/3479840. Accessed 27.11.2017.

- 10. Glazyrina I.P., Yakovleva K.A., Zhadina N.V. social and economic effectiveness of forest use in Russian regions. *Regionalistika=Regionalistics*, 2015, vol. 2, no. 5-6, pp. 18-33. Available at: http://regionalistica.org/images/2015-05-06.pdf#page=18. (In Russian).
- 11. Kolesnikova A.V. Main problems and challenges in the development of the national forest complex. *EKO*, 2013, no. 11, pp. 5-25. (In Russian).
- 12. Kuleshov V.V. (Ed.). *Resursnye regiony Rossii v "novoi real'nosti"* [Resource-based regions of Russia in the new reality]. Novosibirsk: Izd-vo IEOPP SO RAN, 2017. 308 p.
- 13. Clark A.L., Naito K. Structural reform of the mining industry in Asia and the Pacific Region. *Asian Journal of Mining*, 1997, July/August,pp. 28-42.
- 14. Naito K., Myoi H., Otto J., Smith D., Kamitani M. Mineral projects in Asian countries. Geology, regulation, fiscal regimes and the environment. *Resources Policy*, 1998, vol. 24, no. 2, pp. 87-93.
- 15. Nilsson S. *Experiences of policy reforms of the forest sector in transition and other countries with implications for the Chinese forest sector. Interim report. IR-02-043*. 2002. IIASA, Laxenburg, Austria. Available at: http://pure.iiasa.ac.at/6742/1/IR-02-043.pdf
- 16. Glazyrina I.P., Faleichik L.M. (Eds.). *Prirodnyi kapital regiona i rossiisko-kitaiskie transgranichnye otnosheniya:* perspektivy i riski [Natural capital of the region and Russian-Chinese cross-border relations: prospects and risks]. Chita: ZabGU, 2014. 527 p.
- 17. Baklanov P.Ya., Karakin V.P., Sheingauz A.S. Nature use of the Russian Far East and adjacent territories. *Prostranstvennaya ekonomika=Spatial Economics*, 2005, no. 1, pp. 3-10. (In Russian).
- 18. Minakir P.A., Sergienko V.I. *Sintez nauchno-tekhnicheskikh i ekonomicheskikh prognozov: Tikhookeanskaya Rossiya* 2050 [Synthesis of scientific, technological and economic forecasts: Pacific Russia 2050]. Vladivostok: Dal'nauka, 2011. 912 p.
- 19. Antonova N.E. Transformation of the forest complex during the years of Russian reforms: the Far Eastern viewpoint. *Prostranstvennaya ekonomika=Spatial Economics*, 2017, no. 3, pp. 83-106. (In Russian).
- 20. Lomakina N.V. Implementation of the Silk Road project: new incentives and mechanisms for the development of the mineral sector of the economy. *EKO*, 2016, no. 7 (505), pp. 56-68. (In Russian).
- 21. Scherer F.M., Ross D. *Struktura otraslevykh rynkov* [Industrial market structure and economic performance]. Translated from English. Moscow: INFRA-M, 1997. 698 p.
- 22. Vliyanie pryamykh inostrannykh investitsii na sotsial'no-ekonomicheskoe razvitie Dal'nego Vostoka. Issledovanie TsEFIR po zakazu Korporatsii Kinross Gold [The impact of foreign direct investment on the socio-economic development of the Far East. A research by the Center for Economic and Financial Research ordered by Kinross Gold Corporation]. Moscow: TsEFIR, 2013. 110 p. (In Russian).
- 23. Clever J. *China Peoples Republic of: Strong Domestic Demand and Declining Production Encourage Wood Imports in 2017*. GAIN Report Number: CH17061. Date: 7/25/2012. Global Agricultural Information Network. Available at: http://gain.fas.usda.gov/
- 24. Lomakina N.V. *Mineral'no-syr'evoi kompleks Dal'nego Vostoka Rossii: potentsial razvitiya* [Mineral resources sector of the Russian Far East: potential for development]. Khabarovsk: RIOTIP, 2009. 240 p.
- 25. Antonova N.E., Demina O.V., Zakharchenko N.G., Lomakina N.V., Sukhomirov G.I. Estimating the resource sector role in regional economy: the case of Khabarovsk Krai. *Regionalistika=Regionalistics*, 2014, vol. 1, no. 2, pp. 42-70. Available at: http://regionalistica.org/images/2014-02.pdf#page=42. (In Russian).

## **Information about the Authors**

Natal'ya E. Antonova — Doctor of Sciences (Economics), Associate Professor, Chief Researcher, Economic Research Institute, Far Eastern Branch of the Russian Academy of Sciences (153, Tikhookeanskaya Street, Khabarovsk, 680042, Russian Federation; e-mail: antne60@yandex.ru)

Natal'ya V. Lomakina – Doctor of Sciences (Economics), Associate Professor, Chief Researcher, Economic Research Institute, Far Eastern Branch of the Russian Academy of Sciences (153, Tikhookeanskaya Street, Khabarovsk, 680042, Russian Federation; e-mail: lomakina.eri@gmail.com)

Received December 18, 2017.