



Role of state regulation in harmonization of socio-economic interest system in Arctic Zone of Russian Federation (AZRF) in current institutional environment

El papel de la regulación estatal en la armonización del sistema de los intereses sociales y económicos de Federación de Rusia en la Región Rusa del Ártico (RRA), en consideración a las condiciones institucionales contemporáneas

KIRSANOVA , Natalia Y. 1

Received: 16/12/2019 • Approved: 14/03/2020 • Published 23/04/2020

Contents

- [1. Introduction](#)
- [2. Methodology](#)
- [3. Results](#)
- [4. Conclusions](#)
- [Bibliographic references](#)

ABSTRACT:

AZRF's role in ensuring energy, national security determines enhanced attention to the pace, quality of the region development. Regional industry, transport development leads to a complex system of contradictory socio-economic interests: business, state, local population, including indigenous peoples. AZRF development effects are ranked by the degree of economic relation participants' interests. The socio-economic interest system is analyzed. The necessity of increased state responsibility for the results of the regional development is proved, which requires tightening institutional conditions of economic management.

Keywords: The Arctic Zone of the Russian Federation (AZRF), the system of socio-economic interests, direct and external effects, state regulation

RESUMEN:

Como la RRA garantiza la seguridad energética y nacional, se presta mayor atención al tiempo y calidad de su desarrollo. Eso produce un sistema conflictivo de intereses sociales y económicos: los del negocio, estado y de la población local, como pueblos indígenas. Los efectos del desarrollo se clasifican por interés de las entidades económicas. Se analiza el sistema de esos intereses. Se confirma que es necesario elevar la responsabilidad estatal por los resultados del desarrollo, endureciendo las condiciones institucionales.

Palabras clave: Región Rusa del Ártico, sistema de intereses sociales y económicos, efectos directos y externos, regulación estatal

1. Introduction

Today, the Arctic region is a crossroads of interests for many countries, and not only for those with access to the Arctic Ocean. The Arctic development strategies have been adopted in Russia, Norway, Denmark, the USA, Canada, as well as in Iceland, Finland, Sweden, China and India. The

development of the Arctic zone of the Russian Federation (AZRF) is of great strategic importance for a number of reasons. First of all, these are economic reasons. Sanction restrictions have accelerated structural changes in the Russian economy, its diversification and modernization. However, the mineral resource complex (especially the oil and gas sector) will continue playing the key role in the nearest future. As oil and gas production decreases in traditional oil and gas provinces (Katysheva & Tsvetkova, 2018), the importance of offshore fields rises: the Arctic region contains 13% and 30% of the world's undiscovered oil and gas reserves, respectively. And about 19% of Arctic hydrocarbons are concentrated on Russia's shelf. Besides, the global warming and climate change are opening up new opportunities for the development of the Northern Sea Route (NSR). Secondly, it is the necessity to strengthen Russia's geopolitical presence in the Arctic; and the great military and strategic importance of the region. Industrial, transport and other development of the Arctic zone will lead to the necessity to increase the military presence in order to control and protect national interests. Thirdly, the necessity to conduct research activities, to ensure environmental safety, and preserve indigenous peoples (Tsvetkova & Katysheva, 2017).

The strategic importance of the region determines the special attention to its development (Alekseeva, Bogachev, & Gorenburgov, 2019). However, the development of the Arctic increases the human impact with the burden on the Arctic region alone (Grigoriev & Vasilev, 2018) (Vasilev & Vasileva, 2018). At the same time, strengthening industrial and transport development of the AZRF will not allow to retain the gained income growth in the region. According to Article 9 of the Constitution of the Russian Federation (The Constitution of the Russian Federation):

1. Land and other natural resources shall be used and protected in the Russian Federation as the basis for the life and activities of peoples living on the respective territory.
2. Land and other natural resources may be in private, state, municipal and other forms of property.

The wording of the article rules may lead to different interpretations of natural resource use and management. For example, that land and natural resources are the property of "the peoples of the respective territory." However, Article 9 refers to the protection and use of land and other natural resources as the basis for "the lives and activities of the peoples living on the respective territory." (The Constitution of the Russian Federation). This does not mean that the right of ownership (ownership/disposal) belongs to the constituent entities of the Russian Federation. In this regard, according to the Law of the Russian Federation "On Subsoil Resources" adopted in 1992. (Law N 2395-1 of the Russian Federation, adopted on February 21, 1992.), the subsoil resources are the state property and are under the joint competence of the Russian Federation and its constituent entities.

Thus, the current situation leads to a complex system of contradictory socio-economic interests: business, state, local population, including indigenous peoples. For the sustainable development of the AZRF, harmonization of the relations between all participants is required.

2. Methodology

Today, transformations in the global economy and geopolitics lead to changes in the institutional environment of the Russian Federation, the emergence of new institutions and changes in existing economic institutions. A great contribution to the development of institutional theory has been made by the work of scientists such as Ronald Coase (Coase, 1993), Oliver Williamson (Williamson, 1993), Douglass North (North, 1997), Armen Alchian (Alchian & Demsetz, 2003), Herbert Simon (Simon, 1955), Claude Ménard (Ménard, 1996), James Buchanan (Buchanan, 1997), Mancur Olson (Olson, 1995), Viktor Ryazanov (Ryazanov, 2016), and many others.

Institutional deformations, which are characterized by changes in norms, "rules of the game", have a large degree of heterogeneity, since Russia is a country with a federal structure, which determines the presence of a large number of local institutions in the institutional environment. Their influence is especially strong in such a specific region as the AZRF. It is characterized by extremely uneven settlement, a large differentiation of the territory industrial and natural resource potential and the level of infrastructure development. Different industries play a crucial role in the emergence of a system of socio-economic interests and industrial relations of economic entities in the core zones of the Arctic.

The growing role of the AZRF has led to the adoption and implementation of a number of programs and strategies aimed at the region development. The basic strategic documents regulating the development of the AZRF include:

- "Basics of the State Policy of the Russian Federation in the Arctic for the Period till 2020 and for a Further Perspective",
- "Strategy for the Development of the Arctic Zone of the Russian Federation and National Security up to 2020",
- State Program of the Russian Federation "Socio-Economic Development of the Arctic Zone of the Russian Federation",
- Decree No. 296 of the President of the Russian Federation "On the Land Territories of the Arctic Zone of the Russian Federation", and others.

However, the implementation of most of the programs is non-systematic and non-coordinated. It only intensifies the heterogeneity of the institutional environment and polarization of the economic space. This is proven by the data on the socio-economic situation on specific territorial units (according to the Federal State Statistics Service of the Russian Federation). For example, Table 1 contains data on the average nominal monthly pay as of September, 1 2019.

Table 1
The average nominal monthly pay in
the AZRF as of September, 1 2019

	The average nominal monthly pay (in rubles)
Karelia Republic	40,676.4
Komi Republic	50,025.5
Arkhangelsk region	46,163.8
Nenets Autonomous Okrug (District)	79,467.8
Murmansk region	58,669
Tyumen region	45,258.9
Yamalo-Nenets Autonomous Okrug (District)	89,703.2
Krasnoyarsk region	47,599.1
Sakha Republic (Yakutia)	69,825.3
Chukotka Autonomous Okrug (District)	100,106.7

Source: Data of the Federal State Statistics Service

The variation coefficient (calculated by the author, defined as the ratio of average square deviation to average value) totals $\Theta=0.32$. The variation coefficient exceeds 0.3, so the totality is considered to be heterogeneous. It confirms the high differentiation of regions by monthly pay.

Sustainable economic growth requires identification of new institutions and transformation of existing ones. An important stage in this process is the analysis of the socio-economic interest system in the AZRF. The following methods were used for it during the research: the economic-statistical method, economic analysis, methodology of system analysis of socio-economic phenomena and processes. Theoretical and methodical basis of the study were monographs, scientific articles, analytical reports and applied works on the institutional theory and issues of sustainable social and economic development of territories. Statistical data were used as well. The normative-legal basis of the research were legislative, normative acts and resolutions of the State Duma and the Government of the Russian Federation defining the policy in the sphere of state regulation of the AZRF's social and economic development.

3. Results

The AZRF development is traditionally interconnected with the industrial and transport development of the region. The analysis of the impact of industrial and transport development on the ecosystem and the traditional use of natural resources in the region has revealed that companies mainly choose the behavior pattern of a "roving bandit" (the pattern of "stationary bandit" Mancur Olson (Olson, Logic of Collective Action, 1995)): focus on the high current economic effect. Comparison of social and economic interests has proved the significance of the increased state responsibility for the results of the AZRF development. Thus, the institutional environment transformation has to move in the direction of tightening institutional conditions.

3.1. Analysis of the impact of the AZRF industrial and transport development on the ecosystem and traditional natural resource management

Arctic ecosystems are characterized by extreme temperature regimes. Thus, they are extremely sensitive to man-caused impacts. According to the State Report "On the State and Protection of the Environment of the Russian Federation in 2017", in recent years, the following constituent entities in the AZRF have experienced the highest aggregate human impact: the Murmansk region and Sakha Republic (Yakutia), the average human impact: the Arkhangelsk region, Yamalo-Nenets Autonomous Okrug (District), Komi Republic and the Krasnoyarsk region (Taymyrsky Dolgano-Nenetsky District); the lowest aggregate human impact: Nenets Autonomous Okrug (District) and Chukotka Autonomous Okrug (District) (LLC Scientific-Production Enterprise "Cadastre", 2018). The assessment of **the level of human impact** is shown in Tables 2, 3, 4.

Table 2
Amount of pollutants emitted into
the air in the AZRF in 2017

	Pollutants emitted into the air in thousands of tons
Karelia Republic	3.1
Komi Republic	185.2
Arkhangelsk region	90.9
Nenets Autonomous Okrug (District)	100
Murmansk region	242.9
Tyumen region	0.0
Yamalo-Nenets Autonomous Okrug (District)	786.0
Krasnoyarsk region	1,921.8
Sakha Republic (Yakutia)	6.4
Chukotka Autonomous Okrug (District)	20.1
Total amount in the AZRF:	3,356.4

Source: (LLC Scientific-Production Enterprise "Cadastre", 2018)

Table 3

Oil products discharge at the outlet of rivers in the Arctic Ocean basin in 2017

Sea basins	Removal from the catchment area in thousands of tons
The White Sea and Barents Sea basin	17.241
The Kara Sea basin	96.712
The Laptev Sea basin	35.187
The East Siberian Sea basin	2.99
Total amount in the AZRF:	152.13

Source: (LLC Scientific-Production Enterprise "Cadastre", 2018)

Table 4

Generation, utilization, neutralization and disposal of industrial and consumption waste in the AZRF in 2017

	Waste from the previous and current activities in tons
Generation	32,564,481.4
Utilization	18,895,405.2
Neutralization	5,762.4
Storage	27,644,183.9
Dumping of wastes	1,384,842.4
Total amount in the AZRF:	80,494,675.3

Source: (LLC Scientific-Production Enterprise "Cadastre", 2018)

The main pollution sources in the AZRF are: the fuel and energy complex, metallurgy, mineral extraction and processing enterprises, chemical industry, woodworking and pulp and paper industries, as well as transport.

In addition to environmental pollution, the industrial and transport development of the AZRF leads to **the transformation of natural landscapes, loss of ecosystems, and a reduction of biodiversity**.

Landscape change is observed in settlements, mining areas, and linear infrastructure projects. Landscapes are changed as a result of the following: ecosystem pollution, mechanical changes as a result of transport, construction, mining, and deforestation.

The most negative impact on biodiversity is caused by such types of the AZRF industrial development as construction and operation of oil and gas pipelines, the mining and processing industries: habitats of flora and fauna are damaged or destroyed, their number and reproduction intensity decrease; new invasive species appear.

In addition to the negative impact on the environment, the rising pace of the AZRF development threatens **the traditional way of life of indigenous peoples in the Arctic**. The number of indigenous peoples totals about 82,500 people in the Arctic, and about 25% of them are migrating (Tishkov, Kolomiets, Martynova, Novikova, Pivneva, & Terekhina, 2016). Traditional economic

activities in the AZRF are reindeer herding, fishing, sea hunting, and hunting. Industrial development intensification leads to a reduction of resources for the traditional use of natural resources.

The policy of manufacturing companies in the AZRF has been gradually changing in recent years. Today, CSR (corporate social responsibility) programs are not mandatory in the Russian Federation. However, many large companies, mainly mining ones, add social programs to their projects in the activity areas. The practice of entering into agreements and contracts between indigenous communities of the North and industrial enterprises has developed. For example, Exxon Neftegas Limited "Sakhalin-1" and Sakhalin Energy "Sakhalin-2" signed agreements with the regional government and the regional council of the Sakhalin indigenous minorities. Exxon Neftegas Limited does not work directly with individuals: about 10 million rubles are annually transferred to public organizations. Sakhalin Energy supports individuals, national communities, and clan enterprises. Support includes scholarships and financing of paid operations. Besides, the active work of the Russian Association of Indigenous Peoples of the North (RAIPON) contributes to successful negotiations and solving numerous issues in cooperation with government agencies and industrial corporations.

However, today the system of interests of the indigenous population and business is not balanced (Tishkov, Kolomiets, Martynova, Novikova, Pivneva, & Terekhina, 2016). In particular, oil and gas companies are expanding their presence in the northern part of the country as they move towards the Arctic shelf. Enterprises occupy small areas, but transport communications, an extensive network of pipelines and other infrastructure facilities cover large territories. The representatives of Yakutia, Sakhalin, Chukotka, Kamchatka, Ugra, Yamal are concerned that new facilities are designed without participation of indigenous people. The reason is the imperfection of the legal framework. Until now, indigenous peoples cannot influence and control over the work of large resource extraction companies.

3.2. Overview of socio-economic interests in the development of the AZRF

According to the institutional concept, the state is the "third party" establishing a system of coercion and harmonizing the relations of all participants of natural resource use and economic activity.

Today, the institutional environment in Russia's raw materials sector (primarily, in the oil and gas sector) is characterized by soft institutional conditions: insufficiently socially-oriented approach to decision-making and fiscal orientation of the principles for state regulation of companies' activities. Fiscal orientation motivates companies not to socially determined pace of resource potential exploitation, but achieving the maximum possible commercially driven pace, which leads to a significant reduction of the level of recoverable reserves and overexploitation of resources (Pershin, Pervukhin, Ilyushin, & Afanaseva, 2017) (Pershin I. M., Pervukhin, Ilyushin, & Afanaseva, 2017) (Afanaseva & Ilyushin, 2018). The author agrees with Kryukov V.A. and Tokarev A.N., who believe (Kryukov & Tokarev, 2005) that in the conditions of "the transitional nature of the formed institutional systems... it seems reasonable to differentiate rates of special taxes" and to tighten institutional conditions. Tighter institutional conditions will lead to higher state transaction costs for administration and monitoring, while the efficiency will depend on the ratio of potential benefits to costs for all participants in economic relations.

Table 5 provides a ranking of the effects from the AZRF development by the degree of interest of participants in economic relations in their implementation (0 - does not affect interests, 3 - extremely affects interests).

Table 5
Ranking the effects from the AZRF development by the degree of interest of participants in economic relations

Effects from the AZRF development	Business	State	Local population
Negative direct and external effects			
Human impact	0	2	3

Impact on traditional natural resource management	0	2	3
Rising state transaction costs: administration and monitoring	0	3	0
Increased costs due to specific characteristics of the region (climate, underdeveloped infrastructure, shortage of human resources)	3	0	0
Total "-":	-3	-7	-6
Positive direct and external effects			
Gaining profit	3	0	0
Budget revenue growth	0	3	2
Employment, population income	0	2	3
Improved connectivity of cities and urban settlements	2	2	3
Increasing investment and innovation demand from business	0	3	0
Integration into the world economy through cargo transit development	3	3	0
Strengthening the military-strategic importance of the region	0	3	0
Total "+":	+8	+16	+8
ALL points:	+5	+9	+2

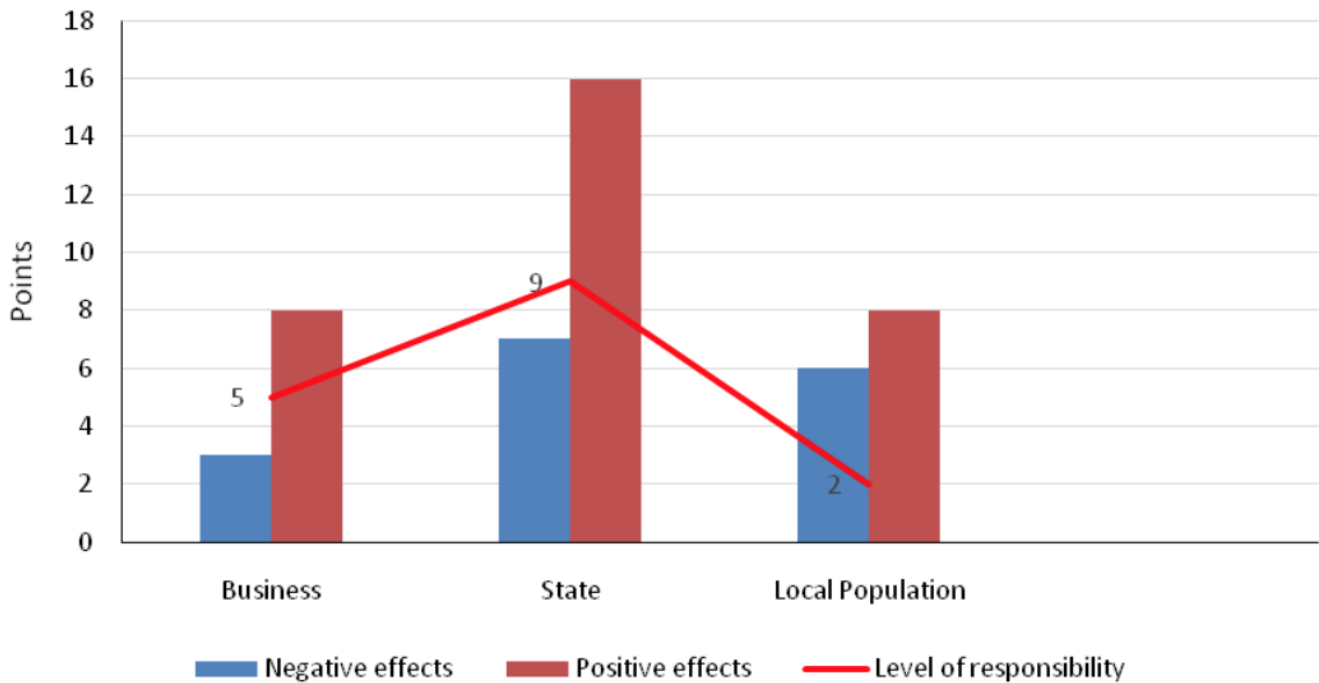
Source: the author's researches

Table 5 shows that the negative effects have a greater impact on the interests of the state and the local population. It is connected with the fact that the human impact from the AZRF development affects only the territory of the region. So the state has to increase transaction costs in order to control, monitor; and provide conditions for attracting business. The state has the highest score from the influence of positive effects as it is connected not only with the increase in revenues from industrial and transport development in the AZRF, but also with the multiplier effects in the long run, as well as with the high military and strategic importance of the Arctic. Figure 1 shows the level of responsibility of participants in economic relations based on their interest.

As a result, the state has the highest score (+9). It is connected with the increased responsibility of the state for the region development. Business ranks second with +5. It is indicative of the necessity of corporate social responsibility to the host territories and local communities. Such a gap in points from the state is explained by difficult conditions for business operation in the region (climatic, infrastructural and other restrictions). The local population has the lowest score (+2). It does not mean that the local population is the least interested in the region development, but it is

the least responsible, since it has the least impact on social and economic development among all participants of economic activity. The fact is that capital is a more mobile production factor.

Figura 1
Level of responsibility of participants
in economic relations in the AZRF



Businesses will not enter regions without an acceptable rate of return because it contradicts companies' strategic goals. The AZRF population is characterized by low mobility due to a number of reasons: long distance between cities and settlements, difficult climatic conditions, migration of indigenous population will not allow them to preserve their traditional way of life, undeveloped housing market (having sold housing, people will not be able to buy housing in regions with the highest standard of living, etc.).

The increased responsibility of the state in the AZRF is also connected the peculiarities of the region. The main task for a business is to make a profit. Businesses entering the AZRF face increased costs due to underdeveloped industrial infrastructure, difficult climatic conditions, social responsibility to host territories, and compensation for damage caused to indigenous peoples and the environment. Thus, considering the current prices for final products (the same regardless of the production place), only the state can create conditions that will provide a reasonable rate of return for business. Different tools can be used: tax benefits, advanced special economic zones (ASEZ), public private partnerships, etc. It is not businesses' task to develop territories. It is the state that is interested in the long-term perspective and obtaining the multiplier effect from the development of territories (creation of jobs, increase of income level, etc.). So, it is more profitable and cheaper for the state corporations to operate in the AZRF. Their presence in the AZRF does not require a rate of return that is necessary to attract private capital. The state is interested in sustainable development. Today, sustainable development means a process of economic and social changes where the exploitation of natural resources, the investment direction, and the direction of scientific and technological development, personal development and institutional changes are mutually compatible and strengthen current and future capacities to meet human needs and aspirations. Achieving this goal is possible if the vectors of business and society interests coincide. The transport development in the region depends on the implementation of infrastructure projects, which are carried out with the predominance of state funding and, as a consequence, control. However, industrial development requires provision of an acceptable rate of return for business; otherwise state corporations can develop the region.

The above analysis has shown that the Arctic region is a zone of increased state responsibility, while the institutional environment should be transformed with tightening institutional conditions.

4. Conclusions

1. The AZRF development is important not only for the energy security of the Russian Federation, but also for national security in general. The role of the Arctic zone will only increase, which will result in increased attention to the pace and quality of the region development.
 2. Industrial and transport development in the AZRF increases the human impact affecting only the Arctic region, which leads to the emergence of a complex system of conflicting socio-economic interests: business, state, local population, including indigenous peoples.
 3. The main pollution sources in the AZRF are: the fuel and energy complex, metallurgy, mineral extraction and processing enterprises, chemical industry, woodworking and pulp and paper industries, as well as transport. In addition to environmental pollution, the industrial and transport development of the AZRF leads to the transformation of natural landscapes, loss of ecosystems and reduction of biodiversity, threatens the traditional way of life of the Arctic indigenous peoples.
 4. Ranking the effects from the AZRF development by the degree of interest of participants in economic relations and the overview of social and economic interests have shown the importance of increased state responsibility for the results of the region development, which requires tightening the institutional conditions of management.
 5. Tightening the institutional conditions should be carried out together with ensuring an acceptable rate of return for business and/or industrial development is expedient for state corporations.
 6. The analysis has shown that the state policy should be aimed at synchronization of regulatory processes at all levels and harmonization of social and economic interests of all participants of nature use and economic activity.
-

Bibliographic references

- Afanaseva, O., & Ilyushin, Y. (2018). Analysis and Processing of the Hydrolitospheric Plast Information Remote Sensing through the Theory of Systems with Distributed Parameters. *18th International Multidisciplinary Scientific GeoConference SGEM 2018, Volume 18, Issue 2*, pp. 35-40.
- Alchian, A. A., & Demsetz, H. (2003). Production, Information costs and Economic Organization (1972). *Anthology Vekhi Ekonomicheskoy Mysli , Volume 5 Industrial Organization*, pp. 280-317.
- Alekseeva, M. B., Bogachev, V. F., & Gorenburgov, M. A. (2019). Systemic Diagnostics of the Arctic Industry Development Strategy. *Zapiski Gornogo Instituta Journal of Mining Institute , Vol. 238*, pp. 450-458.
- Buchanan, J. M. (1997). The Constitution of Economic Policy. The Calculus of Consent. The Limits of Liberty. *Nobel Prize Winners in Economics , Volume 1*, p. 560.
- Coase, R. (1993). *The Firm, the Market, and the Law*. Moscow: Delo.
- Grigoriev, M., & Vasilev, Y. (2018). Increasing Export Potential of the Russian Industry by Development of Rhenium Logistics. *18th International Multidisciplinary Scientific GeoConference SGEM 2018, Vol. 18, Issue 5.3*, pp. 485-490.
- Katysheva, E., & Tsvetkova, A. (2018). Institutional Problems of Domestic Technologies Creation for Exploitation of Hard-to-Recover Oil Reserves in Russia. *18th International Multidisciplinary Scientific GeoConference SGEM 2018, Vol. 18, Issue 5.3*, pp. 523-530.
- Kryukov, V. A., & Tokarev, A. N. (2005). Peculiarities of Subsoil Use in Russia Analysis from Perspective of Institutional Approach. *Journal Vestnik NSU Series Social and Economics Sciences , Volume 5 (Issue 2)*, pp. 110-123.
- Law N 2395-1 of the Russian Federation (adopted on February 21, 1992) On Subsoil Resources.
- LLC Scientific-Production Enterprise "Cadastre". (2018). State Report "On the State and Protection of the Environment of the Russian Federation in 2017", p. 888. The Ministry of Natural Resources and Environment of the Russian Federation.
- Ménard, C. (1996). *L'économie des organisations (1990)*. (T. F. Khudokormova, Trans.) Moscow: Infa-M.
- North, D. (1997). *Institutions, Institutional Change and Economic Performance*. Moscow: Nachala.
- Olson, M. (1995). *Logic of Collective Action*. Moscow: Economic Initiative Foundation.
- Olson, M. (1995). *Logic of Collective Action Public Goods and the Theory of Groups (1965)*. Moscow: IPPE.

Pershin, I. M., Pervukhin, D. A., Ilyushin, Y. V., & Afanaseva, O. V. (2017). Design of Distributed Systems of Hydrolithosphere Processes Management. Selection of Optimal Number of Extracting Wells. *IOP Conference Series Earth and Environmental Science*.

Pershin, I. M., Pervukhin, D. D., Ilyushin, Y. V., & Afanaseva, O. V. (2017). Design of Distributed Systems of Hydrolithosphere Processes Management. A Synthesis of Distributed Management Systems. *IOP Conference Series Earth and Environmental Science*.

Ryazanov, V. T. (2016). *[Un]Real Capitalism. Political Economy of the Crisis and its Consequences for the World Economy and Russia*. Moscow: Ekonomika.

Simon, H. A. (1955, February). A Behavioral Model of Rational Choice. *Quarterly Journal of Economics*, Volume 69, pp. 99–118.

The Constitution of the Russian Federation (passed by nation-wide voting on December 12, 1993) (with the amendments introduced by the Laws of the Russian Federation on amendments to the Constitution of the Russian Federation dated December 30, 2008 N 6-FKZ, dated December 30, 2008 N 7-FKZ, dated February 05, 2014 N 2-FKZ, dated July 21, 2014 N 11-FKZ).

Tishkov, V. A., Kolomiets, O. P., Martynova, Y. P., Novikova, N. I., Pivneva, Y. A., & Terekhina, A. N. (2016). The Russian Arctic Indigenous Peoples and Industrial Development. *N.N. Miklukho-Maklai Institute of Ethnology and Anthropology of the Russian Academy of Sciences*, 272. (E. b. Tishkov, Ed.) Moscow, St. Petersburg: Nestor-Istoriya.

Tsvetkova, A., & Katysheva, E. (2017). Ecological and Economic Efficiency Evaluation of Sustainable Use of Mineral Raw Materials in Modern Conditions. *17th International Multidisciplinary Scientific GeoConference SGEM 2017, Vol. 17, Issue 53*, pp. 241-248.

Vasilev, Y., & Vasileva, P. (2018). Effects of Coal Preparation and Processing in the Russian Coal Value Chain. *18th International Multidisciplinary Scientific GeoConference SGEM 2018, Vol. 18, Issue 5.3*, pp. 319-326.

Williamson, O. (1993). Behavioral Assumptions. (A.B.Belyanin, Trans.) *Almanac THESIS*, Volume 1 (Issue 3), pp. 39-49.

1. Docent of the Department of Economic Theory in the Faculty of Economics of St. Petersburg Mining University, knu77@mail.ru

Revista ESPACIOS. ISSN 0798 1015
Vol. 41 (Nº 14) Year 2020

[\[Index\]](#)

[In case you find any errors on this site, please send e-mail to [webmaster](#)]

revistaESPACIOS.com



This work is under a Creative Commons Attribution-
NonCommercial 4.0 International License