THE RUSSIAN ACADEMY OF SCIENCES
INSTITUTE OF SOCIO-ECONOMIC DEVELOPMENT OF TERRITORIES OF RAS

ECONOMIC AND SOCIAL CHANGES:

FACTS, TRENDS, FORECAST

1 (19) 2012

The journal is published according to the decision of RAS economic institutions' administration in the North-West federal district

Institute of Socio-Economic and Energy Problems of the North
Komi scientific centre of the Ural RAS department (Komi Republic)

Institute of Economics of Karelian scientific centre of RAS (Karelia Republic)

G.P. Luzin Institute of Economic Problems of Kola scientific centre of RAS (the Murmansk region)

Institute of Socio-Economic Development of Territories of RAS (the Vologda region)

and according to the decision of St. Petersburg State University of Engineering and Economics administration

and other RF regions

Institute of Social and Economic Research of Ufa Science Centre of RAS (Bashkortostan Republic)

The decision of Presidium of the Higher Attestation Commission of the Russian MES (№6/6, dated 19.02.2010) the journal is included in the list of leading scientific editions, recommended for publication of the main results of dissertations for the degree of Doctor and Candidate of Sciences.

ISSN 1998-0698

Internet address: **http://esc.vscc.ac.ru**

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FROM THE CHIEF EDITOR

To the political cycle results

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The previous issue of our journal summed the results of the elections to the State Duma of the RF Federal Assembly of the sixth convocation, which took place on December 4, 2011[1].

The power party "United Russia" lost 12 million voters. Having the constitutional majority in the Fifth Duma (315 seats out of 450), the party got hardly 238 deputy mandates, which was only 12 mandates more than the simple majority of the Duma.

The constitutional majority of the deputies of the Firth State Duma turned a deaf ear to the proposals of the opposing parliamentary parties, experts and civil society to hold a number of political and economic measures to restrain the oligarchic rules in the economy, abolish the corrupt ties between state officials, security, defence and law enforcement agencies and the representatives of big business. According to some experts[2], if the State Duma makes the decisions on these issues in time, it would have opportunity to double the budget that would reduce social stratification and take serious measures to address the problems of social justice.

Why did the ruling elite and its representatives in the parliamentary faction of "United Russia" omit to do these obvious steps?

One of the well-known experts characterizes the situation like this, "The bureaucratic monopolization of the Russian economy has assumed the global dimensions. High bureaucracy has become oligarchic towering over the society not only by virtue of its status privileges, but also because of the size of its capital. The oligarchic bureaucrats control the whole industrial sectors, get away from the requirements of market economy and carry out their monopolistic dictates.

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[1] Ilyin V.A. From the Chief Editor. Economic and social changes: facts, trends, forecasts. 2011. No. 6 (18). P. 10.

[2] Speech of V.L. Inozemtsev in the program "What is to be done?" by V. Tretyakov on the TV channel "Culture". September 18, 2011.

At the same time, their abilities to improve economic and social efficiency of production, implement innovations and expand their positions in the foreign markets are too restricted. It is evident, that their organizational, managerial and intellectual potentials are narrow"[3].

There were many examples of the influence of the largest owners' interests on the national and regional development on the pages of our journal[4].

The Government and the State Duma did not create effective mechanisms to oppose the oligarchic structure in the economy that led to the serious losses in the federal and regional budgets.

According to the analysis of ISEDT RAS, the estimated amount of tax payments, which would fill up the budgets of all levels, by only three ferrous metallurgy enterprises for 2008 – 2010, was 42.5 billion rubles *(table I)*.

A candidate for the President of the Russian Federation Vladimir V. Putin points out the actual assessments of changes in the economy over the period from 1991 till 2011 in the series of his articles across the spectrum of the systemic developmental problems of the country until 2020, "In fact, there was a large-scale deindustrialization, with a loss of quality and the structure of production becoming too simple, which explains our excessive dependence on the import of consumer goods, technology and complex products, as well as on the fluctuation of prices of our main export goods. These are factors over which we have, by and large, no control"[5].

40% of the Russian gross domestic product is created by the export of raw materials. Machinery, electronics and other high-tech industries form only 7 – 8% of GDP. Export of high-tech production amounts to 2.3% of industrial export.

Lost tax revenues of the federal and territorial budgets from three ferrous metallurgy enterprises for 2008 – 2010*

The factors of tax base relief	Lost tax revenues, bln. rub.			
	Federal budget	The budget of the Vologda Oblast	The budget of the Chelyabinsk Oblast	The budget of the Lipetsk Oblast
Lost proceeds from the export sales at the prices below the world ones	5.0	5.6	14.5	-
Resource allowances for the depreciation of financial investments and debts of foreign companies	1.1	10.1	0	0
Interest charges on credits and loans	0.4	2.0	0.5	0.8
Lowered tax rate on dividends	0	1.2	0.4	0.9
In total	6.5	18.9	15.4	1.7

* According to the data from the sites of OJSC «Severstal» (http:// www. severstal. com/rus/ir/disclosers/financial_ reports/ index. phtml), OJSC «MMK» (http://www.mmk.ru/ forinvestor/financialstatements/dynamics/) и OGSC «NLMK» (http://www.lipetsk.nlmk.ru/ about/figures/financial/ quarter/).

[3] Mikulskiy K. Modernization of the Russian economy: Necessity and possibility. Society and Economy. 2011. No. 11-12. P. 5-19.

[4] There were publications on the pages of our journal in 2011 devoted to the influence of ferrous metallurgy corporations' interests on the national and regional development, which are expected to be continued in 2012 (Ilyin V.A. The influence of ferrous metallurgy corporations' interests on the regional development. Economic and social changes: facts, trends, forecasts. 2011. No. 3 (15). P. 14-38. Povarova A.I. The influence of the metallurgical corporation owners' interests on the financial performances of the parent enterprise (in the case of OJSC «Severstal»). Economic and social changes: facts, trends, forecasts. 2011. No. 5 (17). P. 36-51).

[5] See: V. Putin. On Our Economic Tasks. Vedomosti. 2012. No. 15 (3029), January 30.

This rate is 32.9% in the U.S. and 32.8% in China. Russia's share in the global export of science intensive products does not exceed 0.3%. The share of national production in the machinery purchased by the Russian business is not more than 1%.

The interests of Russian private owners and numerous state officials are different widely from the needs of most citizens. The differentiation of the population by income is expanded in the country. The current political course does not contribute to the social justice, equal rights and opportunities, strengthening of high morality principles.

Doing some very clear conclusions from the results of socio-economic development over the last two decades, Vladimir V. Putin emphasizes, "Having an economy that cannot guarantee us stability, sovereignty and prosperity is unacceptable for Russia.

Nowadays labour productivity in Russia is three to four times lower than that of the developed economies. What does this mean? For a nation, low labour productivity means a globally uncompetitive economy.

The main problem is rooted in a lack of transparency in the work of state representatives from customs and tax services and their accountability to society. Calling things by their names, this amounts to system-wide corruption.

There is significant potential for increasing tax revenue by eliminating tax evasion through offshore arrangements and fraudulent companies. Law-abiding businesses will only benefit from this, as they will no longer have to compete with those who thrive on defrauding and deceiving the government.

There are some places where we can find additional tax revenue, including expensive real estate, luxury goods, alcohol, and tobacco, as well as increased rental fees in those sectors where they are undervalued. Most important is a surtax on wealth, or to be more precise, a luxury tax"[6].

[6] V.V. Putin. Ibid.

The necessity to solve these problems urgently has been substantiated for a number of years by many Russian economists. For example, it's difficult to disagree with the interpretation that has been given by one of the above-mentioned economic experts from the Russian Academy of Sciences:

"The reason for this is not a lack of knowledge, experience and undeveloped methods, but it is the maintenance of obstacles to reforming that root in the interests of the elite and its unwillingness to audit the current social system in order to recondition the society". The essence of the "elite welfare economics" doesn't consist in the simple satisfaction of the elite's want. It is a redistribution of the social product with the antisocial purposes of its appropriation by the elite in extreme scales"[7].

The articles by V.V. Putin prove the fact that he has been imbued with a deep understanding of the matter. Pointing out the real systemic problems of the economic development, V.V. Putin defines the approaches to overcome them and issues the guidelines.

"The strategies of the large industrial holding companies were aimed at creating internationally competitive corporations, with high market capitalization and stable or expanding niches on the global market. They are these corporations, engaged in versatile activities from the most advanced research and product design to manufacturing, supply and maintenance of their high-tech products that control the global markets for aircraft, ships, computers, pharmaceuticals, medical equipment and other products. They provide the orders for small innovation companies and are taking over successful start-up businesses.

The proportion of high-tech and knowledge-based industries in Russia's GDP must increase by 50% by 2020. This will double Russia's high-tech exports.

[7] Mikulskiy K. Modernization of the Russian economy: Necessity and possibility. Society and Economy. 2011. No. 11-12. P. 5-19.

The share of enterprises that implement technological innovations must increase two-and-a-half times from the current 10.5% to 25% by the end of the decade, reaching the current average in Europe.

The average wage will grow by 60-70% and reach nearly 40,000 rubles per month in 2011 prices. The gross amount will, of course, be higher.

Like their international rivals, for scientific research purposes, Russian research universities should be receiving resources of up to 50% of budgeted education expenditures.

Ten-year programmes of fundamental and exploratory studies should be approved for the Russian Academy of Sciences, leading research universities, and government-run scientific centres.

Preferential development of research universities does not mean that the Russian Academy of Sciences and government-run scientific centres will be neglected. On the contrary, the Russian Academy of Sciences' institutes can only develop steadily in a situation where they can attract strong specialists.

By 2020 intellectual and creative work must make up a substantial part of the small businesses that export their goods and services on the global market"[8].

You can only enjoy the reasonable conceptual approaches by the political leadership to the tasks that must be solved during the next political cycle in order to turn for the modernization of the economy based on the advanced scientific and technological potential of our country with the tide of technological structures in the XXI century.

It seems that the solutions proposed by V.V. Putin will require for another moral atmosphere, when most of voters are sure that the newly chosen government will provide a real implementation of Article 7 of the Constitution of the Russian Federation, *"The Russian Federation is a social State whose policy is aimed at creating conditions for a worthy life and the unhindered development of man"*.

One of the sore points of modern Russian society is a matter of social justice in the privatization of gigantic state ownership which has been created by millions of citizens for many years.

Speaking at the conference of the Russian Union of Industrialists and Entrepreneurs on the 9th of February, 2012, the Chairman of the Government of the Russian Federation Vladimir Putin has made proper emphases in this issue, perhaps, for the first time, "... It also has to do with what was going on in Russia in the 1990s. We have spoken a great deal about this, and we know that business back then amounted to nothing more than slicing up the state-owned pie".

"Certainly, we need to turn this page as well... We need to close this period. There are different ways to do this. We need to discuss them with society and with experts, but we must do so in such a way that society agrees with the resolution of problems dating back to the 1990s, including patently unfair privatization and auctions of all kinds".

"What we absolutely have to do is ensure public legitimacy of the institute of private property and public trust in business. Otherwise we will not be able to develop a modern market economy, let alone create a healthy civil society"[9].

One more political cycle has been over. Russian citizens have made their choice changed seriously the balance of political forces in the State Duma of the sixth convocation. Thereby, people have expressed grave dissatisfaction with the party "United Russia" which was largely an appendage of power-oligarchic

[8] See: V. Putin. On Our Economic Tasks. Vedomosti. 2012. No. 15 (3029), January, 30.

[9] The speech of the Prime Minister Vladimir Putin at the conference of the Russian Union of Industrialists and Entrepreneurs, February 9, 2012.

elite and state bureaucracy. Given a reasonable voters' estimation of the party "United Russia", the candidate for the Presidency V. V. Putin had to rely on the All-Russia People's Front, on the wider social strata.

Most electors (64.1%) have voted for V.V. Putin as the President of the Russian Federation in the first round of the Presidential election on the 4th of March, 2012. This result is not accidental.

On the one hand, this is an appreciation of obvious merits of V. Putin in the maintenance of the country's integrity in the early 2000s, active defense of the national sovereignty in foreign policy, significant reduction of poverty rate and other positive things in the country over the past 12 years. On the other hand, a significant part of the population supported V.V. Putin's "model of 2012", who had indicated critically almost all long-standing systemic problems of the Russian Federation in his conceptual seven articles in the media and stated his vision to solve these problems in the next 6 years.

In future, the level of public support to the President will depend on his ability to fix these conceptual positions in the program activities of each dimension, align them with the community, approve and submit an annual report on their implementation for the electors. Will "new" V.V. Putin lead the country (and himself, in the first place) to a new level of social and political management, which he had spoken in his election speeches and articles about and that most voters had believed in?

It would possible to judge that by the real steps of V.V. Putin in the first year of his third presidency in the Russian Federation.

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We remind the readers the results of the Presidential elections in 1991 – 2012 in the Russian Federation in whole and in the Vologda Oblast.

	June 12, 1991		June 16, 1996 (Round 1)		July 3, 1996 (Round 2)		March 26, 2000		March 14, 2004		March 2, 2008		March 4, 2012 (предварительные итоги на 8.00 05.03.12 г.)	
	RF	VO	RF	VO	RF	VO	RF	VO	RF	VO	RF	VO	RF	VO
The people who took part in the election, in % of the number of voters	74.7	77.4	69.8	69.0	68.8	67.4	68.6	71.0	64.4	62.4	69.7	65.5	**65.4**	**61.7**
The candidate who received the most votes	B.N. Yeltsin		B.N. Yeltsin		B.N. Yeltsin		V.V. Putin		V.V. Putin		D.A. Medvedev		**V.V. Putin**	
The electors voted for the candidate, in %	57.3	53.8	35.3	45.2	53.8	64.0	52.9	66.9	71.3	75.8	70.3	68.6	**64.1**	**59.5**

As in the previous issues, we publish the results of the recent public opinion monitoring of the state of the Russian society*.

* The polls are held six times a year in Vologda, Cherepovets, and in eight districts of the region (Babayevsky District, Velikoustyugsky District, Vozhegodsky District, Gryazovetsky District, Kirillovsky District, Nikolsky District, Tarnogsky District, Sheksninsky District). The method of the survey is a questionnaire poll by place of residence of respondents. The volume of a sample population is 1500 people aged from 18 and older. The sample is purposeful and quoted. Representativeness of the sample is ensured by the observance of the proportions between the urban and rural populations, the proportions between the inhabitants of settlements of various types (rural communities, small and medium-sized city), age and sex structure of the adult population of the region. Sampling error does not exceed 3%.

The basis for comparison is the average data obtained in the course of four measurements taken by ISEDT RAS for the time interval from January to August, 2008.

The results of the polls are available at www.vscc.ac.ru.

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The following tables show the dynamics of some parameters of social well-being and socio-political sentiments in the Vologda Oblast for the period from February 2011 to February 2012.

Here is an estimation of power activity (How do you assess the current activity of ..?)

The line of command	Approval in % to the total number of respondents								Dynamics indexes, Feb., 2012 to 8 months 2008		Dynamics indexes, Feb., 2012 to Dec., 2011	
	8 mont. 2008	Feb. 2011	April 2011	June 2011	Aug. 2011	Oct. 2011	Dec. 2011	Feb. 2012				
The President of the RF	75.0	57.3	61.9	62.7	62.1	56.6	51.7	47.3	**0.63**		**0.91**	
The Chairman of the Government of the RF	76.4	58.9	64.3	60.3	60.4	59.1	52.9	52.6	**0.69**		**0.99**	
The Governor of the Vologda Oblast	57.8	42.4	46.1	46.7	49.5	47.7	41.9	37.7	**0.65**		**0.90**	

The line of command	Disapproval in % to the total number of respondents								Dynamics indexes. Feb. 2012 to 8 months 2008		Dynamics indexes. Feb. 2012 to Dec. 2011	
	8 mont. 2008	Feb. 2011	April 2011	June 2011	Aug. 2011	Oct. 2011	Dec. 2011	Feb. 2012				
The President of the RF	9.3	23.3	23.5	22.1	19.7	29.0	35.7	35.7		**3.84**		**1.00**
The Chairman of the Government of the RF	10.4	22.8	22.3	24.3	21.4	24.7	32.7	32.0		**3.08**	**0.98**	
The Governor of the Vologda Oblast	19.9	29.9	31.1	29.5	24.4	32.1	36.1	33.8		**1.70**	**0.94**	

As can been seen from the tables, the data show an increase in negative assessments as compared with the parameters of the pre-crises period in August, 2008.

Estimation of the social condition

In % to the total number of respondents								Dynamics indexes, Feb., 2012 to 8 months of 2008		Dynamics indexes, Feb., 2012 to Dec., 2011	
8 months of 2008	Feb., 2011	April, 2011	June, 2011	Aug., 2011	Oct., 2011	Dec., 2011	Feb., 2012				
What would you say about your mood in the last days?											
Usual condition, good mood											
70.2	54.6	64.0	64.5	66.7	64.7	64.2	62.9	**0.90**		**0.98**	
Felling stress, anger, fear, depression											
22.1	32.4	28.1	29.4	24.1	29.4	30.2	33.5		**1.52**		**1.11**
What statement, in your opinion, suits the current occasion best of all?											
Everything is not so bad; it's difficult to live, but it's possible to stand it											
81.0	68.9	76.1	78.0	73.2	73.9	78.6	74.9	**0.92**		**0.95**	
It's impossible to bear such plight											
10.9	18.7	16.1	15.9	11.3	15.8	14.1	18.1		**1.66**		**1.28**
Consumer Sentiment Index											
107.5	88.6	90.1	86.1	92.9	88.5	85.6	89.8	**0.84**			**1.05**
What category do you belong to?											
The share of people who consider themselves to be poor and beggars											
39.8	47.6	46.8	43.9	40.8	44.6	41.9	43.2		**1.09**		**1.03**
The share of people who consider themselves to have average income											
50.7	40.0	42.4	46.1	46.2	41.8	42.2	44.9	**0.89**			**1.06**

What party expresses your interest?

Party	In % to the total number of respondents								Dynamics indexes, Feb., 2012 to 8 months of 2008		Dynamics indexes, Feb., 2012 to Dec., 2011	
	8 months of 2008	Feb., 2011	April, 2011	June, 2011	Aug., 2011	Oct., 2011	Dec., 2011	Feb., 2012				
United Russia	40.5	27.3	35.9	34.0	33.7	29.8	26.1	26.0	**0.64**			**1.00**
A Just Russia	5.0	2.7	3.2	5.7	2.7	5.6	13.9	10.2		**2.04**	**0.73**	
KPRF	6.8	8.4	9.7	8.2	10.0	12.1	13.4	10.1		**1.49**	**0.75**	
LDPR	7.7	6.8	7.5	6.9	7.5	9.1	9.2	9.1		**1.18**	**0.99**	
Other	1.4	2.4	1.7	1.1	2.4	3.1	4.6	3.1		**2.21**	**0.67**	
No party	20.1	36.0	28.8	30.4	28.9	28.1	23.9	25.7		**1.28**		**1.08**
It's difficult to answer	13.7	16.3	13.1	13.7	14.8	12.2	9.0	15.8		**1.15**		**1.76**

According to the survey, in February, 2012 there was practically no natural decline in the parameters of such parliamentary parties as "United Russia" and LDPR after the elections on the 4th of December, 2011.

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As in the previous issue, in this one we publish the journal articles rating.

The first ten articles according to the frequency of their viewing for the recent 12 months (March 2011 – February 2012)

Rating	Article	Total time of reading, minutes for the whole period *	Number of readers for the whole accounting period*	Number of views for the recent 12 months	Number of views for the recent 3 months	Average time of viewing (minutes) for the whole accounting period*	Issue	Release date	Authors
1	Development of the regional clusters' system	12385	506	256	62	24	№1	March 2008	Uskova Tamara Vitalyevna
2	Problems of local budgets' and municipal property's formation	6001	334	238	22	18	№1	March 2008	Valentey Sergey Dmitriyevich Khabriyeva Taliya Yarullovna
3	Diversity strategy of the regional economy	6767	331	172	12	20	№1	March 2008	Iogman Leonid Genrikhovich
4	Tendencies and perspectives of the socio-economic development of the Murmansk Oblast	4210	244	126	23	17	№1	March 2008	Didyk Vladimir Vsevolodovich
5	Methodology of the comparative estimation of the scientific and technical potential of the region	2431	130	107	21	19	№12	December 2010	Zadumkin Konstantin Alexeyevich Kondakov Igor Anatolyevich
6	Threats to the region's economic security and the ways to overcome them	1700	96	96	35	18	№14	April 2011	Uskova Tamara Vitalyevna Kondakov Igor Anatolyevich
7	Dynamics of the socio-economic development of Komi Republic	2618	187	105	32	15	№1	March 2008	Lazhentsev Vitaly Nikolayevich
8	Fiscal federalism and inter-budget relations in the Russian Federation	1436	111	111	38	13	№13	March 2011	Avetisyan Ishkhan Artashovich
9	Intellectual resources as the factor of the innovational development	2902	142	79	11	20	№11	September 2010	Ilyin Vladimir Alexandrovich Gulin Konstantin Anatolyevich Uskova Tamara Vitalyevna
10	Integrated ecologically balanced natural resources use is the basis of the Northern regions development	2076	142	94	11	15	№1	March 2008	Larichkin Fedor Dmitrievich

* Account of the site's viewing has been carried out since 2009, December, 12.

Gubanov S.S.

Is the global recession possible in 2012?

The following article is reprinted with the author's permission by the text published in the journal «Economist» № 1, 2012. The article deals with the important issues concerning the threats to the economy of Russia in 2012 and the ways to overcome them.

Sergey S. GUBANOV
Doctor of Economics,
the Chief Editor of the journal "Economist"

Prophecy and prophets of the recession in 2012. Gloomy forecasts predicting the second wave of crisis and global recession in 2012 have been growing since August, 2011. Panic prophecies became more frequent in subsequent months. They had actually merged into a solid stream by the end of the year.

In December, 2011 many respectable organizations, institutions and scientists burst into statements about the inevitable recession in 2012. Their list included the International Monetary Fund, the World Bank, the U.S. Federal Reserve System, and Nobel Prize winners in Economics. A praised professor of New York University N. Roubini supported them. It is considered that he predicted successfully the crisis of 2008 – 2009 and earned the laurels of a cyclic prophet.

Here are typical examples. The IMF raised one of the first loud alarms in September, 2011, "Projections are for an anemic recovery in major advanced economies and a cyclical slowdown in emerging economies"[1]; "Downside risks have increased and are severe"[2]. According to the downside scenario of the IMF, the U.S. could lose about 2.5% of GDP in 2012[3].

The Bank of the U.S. Federal Reserve in San Francisco issued an alarming warning in November. According to forecasts, the recession odds were greater than 50% that we would experience a recession sometime early in 2012[4]. Analysts of the U.S. Federal Reserve explained, that they had appealed to the results of statistical experiments based on the components of the Conference Board's Leading Economic Index, which showed a significant possibility of a U.S. recession over a 24-month period. Since 16 months was over, the recession odds increased from 33% to more than 50% – that was the logic there. The interpretation of the current macroeconomic indicators of the U.S. was slanted in favour of it.

N. Roubini gave utterance to his assessments in December. And they also were depressive, "The outlook for the global economy in 2012 is clear, but it isn't pretty: recession in Europe, anaemic growth at best in the US, and a sharp slowdown in China and in most emerging-market economies. Asian economies are exposed to China" [5]; "At this point, a Eurozone recession is certain" [6].

Hopeless state of mind was shared by Joseph Stiglitz, "Someone recently quipped that the best thing about 2011 was that it was likely better than 2012... I hope that events prove me wrong, and that my pessimism turns out to have been excessive. But I am afraid that the risks are more on the downside" [7].

The apogee of the world concern was December 23 in 2011, when the UN experts joined the prophets of the recession. They released a report "World Economic Situation and Prospects 2012. Global economic outlook", which was mottled with the terms "downturn", "economic recession", etc.

We quote, "The world economy is teetering on the brink of another major downturn... Even this sombre outlook may be too optimistic. A serious, renewed global downturn is looming because of persistent weaknesses in the major developed economies related to problems left unresolved in the aftermath of the Great Recession of 2008 – 2009" [8]; "Risks for a double-dip recession have heightened" [9]; "The United States could trigger another global recession" [10]. According to the downside scenario for the world economy, in 2012 the losses were 0.8% of GDP in the USA and 3.6% in Russia [11].

Such estimates and prophecies can be easily multiplied. But, we think, those of them mentioned above are enough. The picture is clear. If we take these forecasts on faith, the recession threatens, mainly, the leading industrialized countries – the U.S., European countries and China; then it will spread to the less-developed economies. A few months are supposed to be between the world and a terrible depression, because it will hit the world economy in the first half of 2012. This is probably the general opinion.

The baselessness of depressive prophecies. As you can see, competent scientists and world organizations make pessimistic forecasts for the world economy. Naturally, undermining of their authority is out of the question. However, authority is a subjective category, and therefore it isn't a scientific argument. We can't put the authority into the scales of truth.

We have a tool to check the validity of the conclusion about imminent economic recession in the U.S. and other developed countries in 2012. A model of cyclical crises of capitalism gives us this opportunity. We have developed the model based on the classical laws of the capitalist mode of production.

Since the U.S. economy appears in the forefront of the prophecies and predictions of a hypothetical recession in 2012, we have taken the necessary U.S. statistics, grouped the data in the order necessary for our model and carried out the marching. Estimated result was diametrically opposite to gloomy one: it pointed clearly not to the recession, but to the growth.

In other words, a pointer of a scientific cyclic barometer shows the U.S. economic expansion. The other OECD countries including the leading economies were not calculated. We had to consider only the U.S. economy due to the difference in gathering and preparation of statistical data. Nevertheless, its fall from the downside scenario of 2012 has depreciated it in whole.

Contrary to the chorus of gloomy predictions, our conclusion is different. It is the following statement: there will be no second wave of crisis or recession in the advanced OECD countries in 2012; on the contrary, the U.S. will improve its economy in the near months much more rapidly than it had been until recently.

As to the crisis, it will be another cyclical one; it will have nothing to do with the second wave of the last crisis. The crisis impending

objectively isn't possible in the developed countries before the second half of 2013. It is necessary to note that this conclusion has no concern with Russia. We will explain the reasons further.

Thus, the signal of cyclic alarm is enabled for the world economy prematurely and without proper causes. Now we are going to prove our conclusion.

A new model of crises. It is not the place for going into the fundamental questions of the theory of capitalist crisis, confrontation of classics and "neoclassic", reproduction approach and its mathematical formalization. Everyone, who is interested in the theory of the reproduction cycles of the total capital, can find useful publication where the relevant issues are the subject of more detailed analysis[12].

It is enough to describe the specifics of the model we used in brief in order to be closer to the main purposes of the article.

First, the model has been designed in full accordance with the principles and laws, which are basic for the classical employment paradigm.

Second, the model is in keeping with the logic of the reproduction approach, which is classic too. It's necessary to note, that classic reproduction rejects both production for the sake of production and exalted "neoclassical" exchange for the sake of exchange.

Third, the specifics of the crisis model we used are based on the criteria and indicators of social division of labor, so the model doesn't depend on any value aggregates and indicators. It isn't affected by GDP, prices, inflation, deflators, wages and income, currency and stock rates, exports and imports, savings, loans, debts, etc. While it reflects very accurately the aggregate macroeconomic dynamics that is cyclic in capitalism, by definition.

Fourth, the model has been tested in the long series of the U.S. and the UK statistics, leading the countdown to 1910. Each time indicated points of the crisis coincided with those, which had been fixed officially, in particular, by the U.S. National Bureau of Economic Research, which is responsible for the identification of the beginning and the end of cyclical crises in the U.S.

Fifth, the model has already helped us to identify an initial point of the U.S. recession in the last crisis cycle – December, 2007, as well as a point of transition from depression to recovery– the second quarter of 2009. Both points were confirmed by the National Bureau of Economic Research later; the traditional delay amounted to 1.5 – 2 years.

The economy is on the rise in the U.S. Thus, we are in the firm belief that the model is adequate, as well as the result obtained, which shows only one crucial moment for the U.S. now, namely, the transition from recovery to growth in February, 2011. The other point hasn't been seen yet. Therefore, the U.S. economy hasn't reached a turning point from expansion to recession and will not go up to it in 2012. The recession odds come to nothing in the next 12 months.

Undoubtedly, the way out of the latest crisis was dragged out. The depression lasted longer than it was usually in the postwar period. Only since February, 2011 the U.S. economy has moved from the sluggish recovery to the growth, though it is too slow. As we can see, there were some reasons for that.

Nevertheless, the real GDP growth in the U.S. in 2011 seems to be more dynamic than the current estimates show it. In our opinion, the next statistical adjustments, refinements and reappraisals will be oriented to increase it in about six months.

However that may be, the U.S. has at least 15 months of GDP growth, or five crisis-free quarters in future. We can't look beyond a year and a half period because there are no data to do this. However, this horizon is more than enough to be satisfied with it.

A closer analysis of traditional macroeconomic indicators shows that the U.S. economy

looks much better than it is assumed. Corporate profits are rising. The volume of the U.S. GDP has exceeded pre-crisis rate. It was increased by about 3% in the fourth quarter of 2011. The supply of jobs is being increased. And this trend will cover the whole first half of 2012. House building is being recovered. The final consumption level is 4.5% higher than it was before the crisis. The volume of savings and loans is being expanded. Service costs of households' debt are being gradually reduced – from 14% at the peak down to 11%.

Thus, the dynamics of the expanding U.S. economy is not declining, but it is increasing, even in value terms.

The reasons of sluggish recovery. According to classical political economy, a special anti-crisis function immanent to the price of production activates in the periods of capitalist crises. Here is a classical formula of production price: P = k + K * r, where P – the price of production, k – costs, K – advanced capital value, r – general economic, or average, profit rate. The last tends to zero under the crisis {r – > 0), so that the price of production is approximate to the costs (P –> k). In this case, first of all, return on fictitious capital turnover decreases extremely: if r –> 0, then A> r –> 0.

Thus, an anti-crisis function of the production price cuts the risk capital from the industrial capital, which gets rid regularly of the parasitic ballast through market crashes.

Therefore, speculative capital, monetary capital and capital unsecured with commodities cease to be profitable and grow in value in the phase of the crisis. In order to realize a profit, money capital must be converted, firstly, into productive capital embodied in the means of production and labour force, and then it must be turned into commodity capital presented in final goods. At the same time, it is important for the new productive capital to have a technical structure which is higher than average ones, because a level of costs is dependent functionally on the organic structure of capital in production.

In short, first of all the mechanism of the production cost cuts off speculative capital investment spheres in the phase of the crisis and leaves productive ones. Along with that, the mechanism of production cost includes the effect of one more powerful factor of development because it suppresses the extraction of profit by increase in prices. Inflated inflationary profits come to nothing. The main sources of income are increased productivity, expansion of commodity production, labour saving and a cut in expenditures.

Minimum levels of interest rates, supported currently in the developed countries (r – > 0), prove that the anti-crisis mechanism of reproduction price is really up, and it is running. At the same time, it is under the pressure of some opposed factors, that's why speculative ballast is partially dumped, and it continues to limit significantly the accumulation of new industrial capital.

What factors hamper recovery and slacken the expansion of reproduction? Are they well-known? Yes, they are. We mention only the key ones.

The first factor is an institutional boundary blur between industrial and exchange speculative capital.

The wall was erected between one and another under the "New Deal" in the United States in 1934. It prevented the transformation of industrial capital into speculative one. The Glass-Steagall's mechanism stood guard over the border. It did not allow any companies or banks to put industrial capital into speculative stock exchange operation. But since the 1990s the Glass-Steagall's mechanism has been actually dismantled. Banks and corporations began to speculate and chase the quick profits at the expense of industrial capital, as it was before the Great Depression in the early 1930s, and that caused burning indignation of John Maynard Keynes in "The General Theory".

Nowadays there is no boundary between capital-function and capital-ownership even within the U.S. multinationals.

Their leadership acts both as an industrial capitalist and a speculator. Managers are rushing around in search of more profitable ways to invest their money capital – in production or stock exchange. Low lending rate is concentrating the flow of funds in production, while the high profitability of speculative operations is persistently straying them to currency and stock exchanges, including the markets of underdeveloped countries, where the exchange profitability is particularly high because of comprador sales of national wealth.

The second factor includes the workload of a printing press of the U.S. Federal Reserve System and incessant injections of the dollars unsecured with commodities (in fact, they are sweet wrappers) into the arteries of the global commodity and money circulation. One package of issue referred modestly to as "quantitative lessening" is replaced by another. Issuing dollars are instantly transformed into inflationary petrodollars. They raise the prices for oil, gas, metals, fertilizers and other resources.

Thus, the U.S. Federal Reserve System is flooding the world with dollar wrappers; it pumps speculative bubbles worldwide; it raises artificially the exchange pyramids and bubbles, and, as a result, it overstates the mass and the profitability of speculative monetary capital. It's necessary to note, that the representatives of the U.S. Federal Reserve System deny even at the Senate hearing the connection between speculative oil price inflation and dollar issue, which are secured with the only political dictates of the United States. But the regression models show the opposite facts, with a correlation coefficient 65 – 75%.

There is a final benefit of the USA in the situation when the world delivers the goods to this country in exchange for money unsecured with commodities. So, the U.S. has got a free imperialist rent each year wringing on a vast scale by the monetary leverage of "the dollar imperialism".

The third factor is inflationary high oil prices. They increase the cost of commodity production, reduce the recoupment of technology investment, and slow down the rates of industrial recovery and growth.

The fourth factor is the deregulation of banking, financial and stock exchange turnover. Liberalization, or freedom from regulation, increases both the speed of speculative pyramids and their size. Hence there is an increase in frequency and amplitude of stock-exchange crashes in the 2000s and depressed conditions and incentives for expanded reproduction of industrial capital.

The factors, noted briefly and counteracted the natural implementation of anti-crisis function of production price, are purely non-economic in origin. All of them are generated by "the dollar imperialism", or the dollar globalization.

In turn, "the dollar imperialism" is based on the strength of the American war machine. Moreover, its military power is also globalized unilaterally by the U.S., which tries doggedly to achieve the total world domination – military, political, economic and monetary.

To sum up, we can say, that the extremely slow rate of revival and recovery after the crisis of 2007 – 2009 is caused by "the dollar imperialism", which has turned into the source of the modern world economic imbalances and speculative stock-exchange pyramids.

Debt crisis of the EU. The current position of the U.S. is asymmetric to the situation in the EU due to "the dollar imperialism". When the situation is bad for the euro and the EU economy, it is good for the U.S. dollar and the American economy, and vice versa. After the crisis American multinational corporations try to achieve profit markup by any means including the funds of the developed and underdeveloped economies.

There were no any exceptions for the global "dollar imperialism" before; and they don't exist now. It does not give any indulgences to the EU countries, where it is a reason of the

large-scale debt crisis. It may sound ironic, but it is a fact that some European states and governments are the debtors of the American private capital. This is also a direct consequence of deregulation and monetary and financial liberalization, rather than the decentralization of the EU fiscal structure. Of course, the EU leadership will solve these problems, but now the leaders are far from this goal, as they try to shift the loss of speculative capital onto the taxpayers. The response is a pan-European social protest, which moves to the true solution of the problem associated with the bankruptcy of speculative capital.

Nevertheless, the debt crisis in the EU, produced by "the dollar imperialism" in the geopolitical interests of the United States, is not identical to the cyclic one. The European Central Bank keeps a long-term low interest rate, thus stimulating an anti-crisis function of production price and the introduction of the new industrial capital with higher technical structure. Germany and France avoid deliberately the euro issue unsecured with commodities because they realize its harmfulness for the European industrial capital. In general, the EU is paying for the debt crisis in unprecedented low growth and high unemployment. But there is no recession or depression here.

Threats to Russia. As the dominance of the raw materials export model is preserved even after the monetary crisis of 2008-2010, the GDP growth in Russia is still dependent on the inflation of petrodollars and the printing press of the American Federal Reserve System. The development of the Russian economy isn't still dependent on Russia. And this factor outweighs everything else.

There were a lot of declarations and appeals to the transition from the external to internal development and a new post-crisis economic model. In fact, the system of our country hasn't changed a bit because the economic policy continues to contradict the development formula of Russia: it is neo-industrialization plus vertical integration.

Straight, hard and cruel dependence of the national economy on raw materials export, petrodollar inflation and the printing press of the U.S. Federal Reserve System puts Russia in a position of dependence on the currency and monetary factors, which are not influenced or controlled by the Government of the Russian Federation. It is know that the GDP growth, based on raw materials export in Russia, is directly proportional to the issue and depreciation, or petrodollar inflation. If depreciation is more, oil prices and the dollar volume of GDP are higher; if depreciation is less, oil prices and nominal volume of GDP are lower.

Thus, the position of post-reform Russian economy is regulated by the American printing press.

Moreover, it is exacerbated by one more factor. The problem is the oil market has become a manipulated market since 2000. The oil price has ceased to follow the changes in supply and demand. Petrodollars issue and their inflation have the decisive influence over its formation. If during the period of 2000 – 2010 domestic dollar, circulating in the U.S., has depreciated by 25-30%, the petrodollars depreciation was fivefold and more rapid almost in 20 times. The current rate of GDP in Russia amounts to 450-500 billion dollars in terms of purchasing power of the petrodollar in 2000.

You cannot ignore the fact that the oil market has turned into a speculative one. According to our calculations, since 2000 the share of supply and demand impact on it is 5%, whereas the influence weight of speculative capital is 95%. Oil is used as an object in stock-exchange speculation. Speculative pyramids are based on oil, but they tend to collapse like a house of cards.

In view of these factors, it's impossible to predict any oil market conditions. Even global recession does not necessarily leads to the drop in oil prices, because their development is predetermined by the petrodollar issue.

We can firmly state only one thing: any drop in oil prices is equivalent to the economic recession for Russia as a result of functioning of the raw materials export model.

We do not know anything about the development of oil prices in 2012. But it is know that the U.S. Federal Reserve System intends to print unsecured petrodollars and throw them into circulation up to the end of the first quarter of 2012. If it's true, this means direct support for a speculative pyramid, and therefore we can assume that steep drops in the price conditions of oil market is unlikely up to the end of March, 2012. But we can't guarantee that this is true.

We have no idea about the situation after March of 2012 and the decisions beneficial to the U.S. administration.

If Washington decides to act in behalf of industrial capital of American multinational corporations and urge on neo-industrial growth, there will be the command to stop petrodollar issue. Then oil prices and speculative pyramid will collapse, and the growth rates of the U.S. economy will increase.

At the same time, it is extremely profitable for the U.S. to print the petrodollars, because gratuitous resources, which are pumped by "the dollar imperialism" out of the other countries such as natural, mineral, technical, consumer, etc., are flowing overseas nonstop in exchange for the dollar funny money.

Net enrichment of the U.S. at the expense of a currency and monetary factor now comes to $ 1 trillion dollars a year. Moreover, it is represented only by material values, in spite of the primitive and naive notions about "postmodern values" of American multinational corporations. Such an imperialist rent giant in size, appropriated by the U.S., hampers the suspension of petrodollar issue.

In strategic terms, the U.S. will not stop printing petrodollars in any case. They will surely continue to appropriate real goods in exchange for virtual petrodollars in order to enrich themselves with resources at the expense of the rest of the world.

The "dollar imperialism" pumps out their rent as a non-stop conveyor. And the situation won't change until there are no oil rates in another currency, or until the oil-producing countries shut themselves off with the firm foreign trade monopoly and eliminate the petrodollar stabilization funds of dollar inflation import.

Of course, the nature of these funds must be understood clearly. It's impossible to cover the commodity imbalance with the monetary one. The gap between trade and monetary is inflation. If a country exports its goods and gets monetary mass in exchange for the equivalent mass of commodities, it means the export of goods in exchange for the import of inflation. It is always profitable for the country, which prints the currency of payment, to change money unsecured with commodities for real goods. But it is unprofitable for the countries, which part with their goods free of charge. It's beneficial for the U.S., which gives monetary fiction and gets a full-fledged mass of goods in return maintaining the purchasing power of the national dollar.

The U.S. will not abandon its strategy of "the dollar imperialism" in any case. Temporary suspension of the printing press of the U.S. Federal Reserve System is another matter. For example, during the period when a partial loss of imperialist rent is balanced by the acquisitions in the field of industrial capital and political concessions of some oil exporting countries, etc.

Therefore, it is impossible to eliminate a possibility of a sudden Washington's transition from a "weak" petrodollar to a "strong" one in 2012. The drop in oil prices will provoke a new currency and monetary crisis in Russia. Its direct consequences are obvious: devaluation of the ruble, flight of the dollars abroad, budget deficit, contraction in aggregate demand, scraping of investment and social programs, collapse of industrial production. In general, the situation happened in 2008 can repeat in such a course of events.

It is known that it is impossible to enter the same water. If the crisis in Russia concurred with the crisis in the developed countries in 2008, then this time there can be a striking asymmetry: the recession will take place in Russia, when the economic growth is continued in the advanced industrial countries. In this case it is useless to appeal to the thesis that the crisis comes from outside and Russia is in the same boat with the developed nations, and it is plunged into the crisis at the same time with them.

There are no recession dangers for the developed countries in 2012. Moreover, there is a danger in Russia; and it's more serious than it was in 2008.

What is to be done? The only true solution is to eliminate the dependence on the petrodollars of socio-economic development of Russia and switch over to home, reproductive, neo-industrial sources, factors and motive powers.

There are no such purposes and decisions in the updated version of the Strategy-2020. Our country has too little time to wait until 2020, carrying out a false and dangerous experiment, proposed by the liberal-oligarchic experts as "the supply-side economics". The task is to increase budget revenues on the basis of high growth of the national economy, but not to reduce budget expenditures.

In general, the Strategy-2020 contains the steps that we shouldn't do. So, the best thing is a rejection of it for the sake of a fundamentally different strategy aiming at the new industrialization and vertical integration of the national economy.

It is necessary to substitute an export-raw material model for a planning integrated system of neo-industrial reproduction to cut the Gordian knot of dependency on petrodollars. Obligatory and objective prerequisite for this is a strategic nationalization of land, power industry and other infrastructure monopolies, military-industrial complex, etc. It is known that the Government of the RF would like to confine itself to the current budgetary nationalization of raw materials export rents. The Government doesn't want to touch the property relations. But this position is for the past. It has come into conflict with the realities and challenges of the time. It is impossible to keep Russia on a short leash of petrodollars and expose it to danger of crisis asymmetry, inflation and devaluation shocks.

There is no strategic nationalization alternative for the planned vertical integration of ownership and industrial production in order to ensure a new industrialization of our country. The situation will be different if it is possible to organize a vertical integration of ownership, combining directly the mining and manufacturing sectors of the national industry without the nationalization of the strategic heights of the economy. However, this variant is unrealistic: it is conceivable but unrealizable. It is impossible prove the contrary of this statement, but no one wants to do it.

Nowadays time isn't on the side of Russia. Our country is in the situation of the countdown. The delay in the vertical integration of ownership leads objectively to the national catastrophe. This is not exaggeration, but verified assessment based on the scientific analysis of the current situation.

Nationalization for the sake of vertical integration is the only right way out. Our country has got no alternative in terms of neo-industrial prospects.

Russia will eliminate quickly the dependence on petrodollars based on the nationalized heights of the economy and restore or reorganize the vertically integrated structure of the fuel and energy complex, power industry. The country will link institutionally extraction of raw materials with their deep and high-tech industrial processing and implement the national plan on creation of workstations within the scope of the progressive distribution of productive forces. It will stop "black redistribution", removes the centrifugal tendencies, establish direct links between producers and trade, and eliminate the offshore and intermediary economy. Russia will also

ensure the growth of the budget at the expense of infrastructure rent, as well as high-tech and neo-industrial rent such as aviation and others, which go to comprador private capital, and then they are converted into dollars and are exported abroad.

In addition, the strategic nationalization is a basis, which will allow us to restore mutually beneficial infrastructure, currency, price, tax, economic and systemic unity of the CIS countries through the synchronization of their integration on the way of new industrialization.

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STATE AND ECONOMY

UDC 553.98

Sustainable development of a new extractive region in the oil and gas project activity on the Arctic Shelf

The article deals with the questions of sustainable development of a new extracting region during hydrocarbon field development. Balance of interests and minimizing of the contradictions between state, oil and gas companies and local communities in the oil and gas project activity define the progressive and balanced economic development of the new extracting region. The authors show the social and economic approaches for hydrocarbon field development taking into account the foreign experience of natural resources exploitation. The article also covers the questions related to the interaction between the state and oil and gas business and the creation of effective control strategy for hydrocarbon resources development in the new oil and gas extracting region.

Sustainable development, oil and gas industry, shelf, hydrocarbon resources, social and economic effects.

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The Russian legislation and subsoil use regulation system were focused on the problem of maximum involvement of natural resources in the market turnover and rental income removal at the end of the last century. In modern terms, the main priorities of the state regulation of oil and gas industry should be aimed at the creation of conditions for the mineral complex participation in the solution of a wide range of social and economic problems in connection with the economic transition to stable development.

Sustainable development of a new oil and gas region presupposes the mechanisms to ensure the necessary development, consumption level and social cohesion, sustainable economic development and implementation of stable functioning of the biosphere.

The main direction of oil and gas industry development is the creation of such conditions that would favour the convergence of realized and potential value of hydrocarbons. The public value means the totality of the effects (direct, indirect or multiplicative) which are derived from the development and utilization of hydrocarbon resources [7].

Such effects can be expressed not only in money but in the form of such indirect benefits as the increasing of the human capital value. In this case the human capital is referred to the set of such human skills as education, intelligence, creativity, work experience, entrepreneurial ability, etc. Thus, during the development of oil and gas resources in the central planning and management system they focused on the achievement of a certain level of business process perspective, so the realized value (at the regional level) differed significantly from its potential level.

It is possible to ensure the salable public value of hydrocarbon resources if we have the developed system of modern civil society institutions, as well as the efficient specialized institutional system aimed at the socially-oriented deposit development.

The economy of oil and gas regions in general is based on the extraction of hydrocarbon resources. It is heavily dependent on the pace of the deposit development. The significant changes in living conditions take place in the process of economical activity. There are also structural improvements in the regional economy and social sphere, development of transport systems, environmental changes and intensification of migration flows. Large-scale commercial development of oil and gas area, significant changes in the economic and social sphere concern the people living in this area. However, the process of oil and gas exploration is accompanied by a number of both positive and negative trends, which require the aimed actions of the state to correct these trends.

An exhausting factor of hydrocarbon resources requires taking into account not only economic but also social impacts of resource development and conditions of the regional economic activity at all the stages of production. These factors require an integrated approach to the assessment of the oil and gas exploration consequences and full accounting of the oil and gas exploration features and their influence over the social and economic system in the region.

Experience of the leading oil and gas countries shows that the approaches to the integration of hydrocarbon resources development and a wide range of social and economic problems were successfully implemented over the past 20-30 years. Such approaches suppose the emphasis transfer from the estimates of the financial and economic impacts of the projects to the social and economic results of their implementation.

Policy analysis of the industrialized countries, which are also the major users of mineral resources (Norway, Australia, the USA, the UK, Germany), shows that the liberal institutional system in the field of property related to the usage of conventional assets is supplemented with an extensive system of rules, regulations and procedures in the field of subsoil use.

These facts meet the requirement of the state in the protection of its rights as the owner of subsoil resources, as well as they create the conditions for the effective dynamics of non-renewable resources development and use in terms of the public interests.

The most typical example of responsiveness to the social and economic factors in determining of the hydrocarbon resources turnover is the development of the North Sea shelf by Norway especially. There wasn't the oil and gas industry in Norway in the early 1960s, but there was awareness that it was necessary to develop it with the active participation of the government. The auspicious economic situation favour the development of firm negotiating conditions for the oil and gas industry: sustained growth of economy, high employment, budget surpluses and the lack of urgent necessity in the accelerated development of oil and gas industry in whole.

This situation set out a framework of the stable state positions in the negotiations with the international companies which held their interests in the development of the Norwegian continental shelf. The main objective of Norway was to gain its positions by the expanding of its domestic presence: state participation in the projects and increasing of oil and gas industry regulation rate in whole. The government with the state ownership of subsoil can expect not only to receive money (taxes and charges) depending on the institutional and economic conditions, as well as the bargaining power between the state and subsoil users. A very important factor is the development of the local industries related to the supply of goods and services for the oil and gas industry.

Norway's success in the high-level use of hydrocarbon resources for the benefit of the society owes the government policy, which encourages partnerships between the foreign and Norwegian companies. Thus, the Norwegian government has made compulsory research programs for the foreign companies.

It is a prerequisite for the fact that the oil and gas technologies, developed and implemented in Norway, currently are the best ones in their fields. Since 1970 the state has been recognizing the importance of promoting competition in the oil and gas industry and at the same time the need to encourage the development of domestic oil and gas sector. Thus, the use of local goods and services was explicitly defined by the law: the Norwegian share of delivery quota was 90% in the period from 1972 till 1974 [3].

The Norwegian state-owned company "Statoil" was created in 1972. Also two private Norwegian companies "Norsk Hydro" and "Saga Petroleum" began to develop the shelf. Their activity was concentrated to create the key role of the Norwegian companies in the oil and gas sector.

The international and foreign companies were given a key role in technological ensuring in the cooperative alliance with the Norwegian companies. Also they played a role of a "catalyst" in the process of the Norwegian companies' transformation into the full-fledged offshore operators.

Joint ventures in the service sector were also established on the basis of the principles, the results of those allowed the Norwegian engineering companies to gain an access to the advanced technologies. The Norwegian experience shows that the procedure of the foreign companies' access to the development of the hydrocarbon deposits can be used effectively as a tool to solve a wide range of technological, economic and social problems. So, for example, the implemented social value of "Ekofisk" field development (it is the largest oilfield of the North Sea offshore) at the end of 2004 was the following: the total value of extracted resources included 36% of goods and services value (they were bought for the project), about 50% were the share of usual taxes and rent charges, approximately 4% were the share of salary for the employees and the owners of the subsoil companies earned about 10%.

A very important aspect of the oil and gas sector activity is its influence over the social and economic system in the region and over the country in whole. It provides the additional benefits to different recipient (for example, industry, science and education). However, not all of these benefits can be accurately assessed, for example, if we compare them with indirect and multiplier effects from the implementation of the investment projects which are characterized by the high capital intensity and long organizational period.

Promotion of the productive infrastructure in the extractive regions deserves consideration in the national economic policies. It is a prerequisite for sustainable and effective development of the oil and gas industry as a basic component of the regional economic specialization. The industrial structure of the oil and gas region is characterized by the fact that it renders the tangible and intangible productive services, which are auxiliary in nature. Oil and gas industry has specific requirements for service-producing industrial infrastructure in the region; it defines economic activities of the regional enterprises and organizations and, indirectly, the standard of living.

The main tasks of the new extractive regions at the different stages of deposit development are the following [10]:

1. At the exploratory stage:
- creation of the conditions to attract the oil and gas companies in the region (normative and legal, investment, etc.);
- encouraging of the hydrocarbon deposits exploration in the region;
2. At the stage of the growing production:
- maintenance of the competitive environment in the emerging oil and gas sector;
- attraction of new investments to the region;
- ensuring of the effective stock selection;
- filling of the budget;
- rental income maximization;
- creation of the industrial, transport and social infrastructure;
- involvement of manpower resources;
3. At the stage of the stable production:
- tax collection;
- use of oil and gas production funds;
4. At the stage of the final production:
- extension of oil and gas production in the region;
- formation of a new economic structure;
- the social issues associated with the labor force release;
- use of accumulated intellectual, industrial, infrastructural and financial capacity.

There is necessity to maintain the employment rate and form a new economic structure in the region as the development of hydrocarbon fields is continued.

The factors and conditions established in the territory during the oil and gas sector development can be successfully used in the formation of a new structure of the regional economy in future. The auxiliary process network can be re-oriented to service oil and gas production in other regions. Oil and gas processing facilities, as experience shows, can continue their operation at the expense of raw materials from other producing regions (including the newly developed areas). The intellectual capacity (skills, knowledge and experience of employees) accumulated during the development of oil and gas region can be used in the development of new high-tech industries in the region.

At the same time creation of highly developed infrastructure in the process of deposit development allows us to consider the opportunity to cross-cutting transportation of various cargoes as a very significant way of the regional economic development at the stage of the final production.

The process of equal relationship with the major oil and gas companies and operators of the projects by the conclusion of various agreements helps to avoid the aggravation of contradictions.

Settlement of relations between the region and extractive companies is mainly related to offset of debt, environmental issues, reproduction of mineral resources and protection of the indigenous population. However, such agreements are current in nature; they are aimed to solve a backlog of problems and they don't influence over the regional economy activity in the long term.

Balance of interests and minimization of the conflicts between our state, oil and gas companies and local population largely determine the progressive and balanced socio-economic development of the extractive region. Ignoring or infringement of the interests of any of these subjects will inevitably lead to the significant reduction in the so-called synergy, based on the mutual cooperation.

The balance of interests between the state, government and local population is a key prerequisite for sustainable regional development. In the process of the Arctic deposit development the nature of such interaction has its own characteristics and the problems of interest coordination are more acute and urgent. Firstly, it is caused by the predominance of resource extraction industries and increasing anthropogenic load on the fragile nature of the northern territories. Such changes influence greatly over the old-people engaged in the traditional use of land. Natural ecosystem disturbance can mean not only the deterioration of living conditions but it can undermine their ethnic and cultural sustainability. Secondly, it is caused by the increased demands and great expenditures of the social infrastructure in the northern regions because of rugged climatic conditions. So there is a necessity to increase social responsibility of businesses which work or intend to carry out their activities in this area.

The analysis shows that interests of the population in Russia are the least protected ones in the institutional environment of interaction between government, business and local communities.

This is due to many factors such as the lack of legal safeguards to protect the population interests, weak enforcement mechanisms of the existing regulatory requirements and undeveloped civil society institutions that are able to represent and defend such interests.

The protection of rights of the people from the northern regions has become topical because there are the plans to implement the large-scale investment projects to develop new deposits of natural resources, especially hydrocarbon resources of the Arctic shelf. Such projects require huge financial and human expenditures and suitable infrastructure, which greatly change the social and economic situation in the areas covered by the impact of the projects. World and domestic experience shows that these effects can be both positive and negative according to their influence over the social and economic conditions of local population.

The process of hydrocarbon deposits' development includes the following macro-economic effects of their development:

- effective investments;
- modern technologies transfer;
- increase in budgetary revenues;
- indirect effects associated with subcontracting of the regional enterprises;
- increase of the employment in the region.

Table 1 summarizes the positive and negative consequences of the oil and gas fields' development for the region that influence over the formation of multiplicative economic effects.

All these macroeconomic effects are the components of economic multiplier effect, which expresses the current economic relationship between the sectors. At the same time it is accepted to allocate the mining industry as a so-called "generator" of the investment wave which transmits economic influence to the related sectors.

Table 1. Objective positive and negative consequences of the oil and gas fields' development for the extractive region

Positive	Negative
Rapid growth of industrial production in the region	Limitation of economic dynamics by the deposit reserves
Increase in tax base	Competitive reduction of other companies in the region because of tax preferences
Increase in profitability of hydrocarbon production	Inclination of the regional economic system to a monoproduct type
Population's incomes growth	Differentiation according population's incomes
Impetus to the development of regional infrastructure	Sharp load incensement on the ecological system

The concept of "multiplier" (from Lat. "multiplicator" means "increasing") was introduced in economics by the English economist Robert Kahn in 1931. Considering the influence of the public works, which were organized by the Roosevelt administration to fight recession and unemployment, he noted that public investments to public works led to the multiplier effect of employment: there was not only primary but also secondary, tertiary, etc. employment.

In other words, the initial investment costs of the budget led to the multiplication of purchasing power and employment. Those ideas were expressed in the Keynesian theory of the multiplier effect. The multiplier was meant as the coefficient in the Keynesian theory which showed the dependence of output and national income from investment changes.

The multiplier principle is based on the relationship between different sectors or industries. In general, it can be formulated as the following statement: growth of demand in one sector will automatically cause the growth of demand in other industries that are linked to each other technologically. Thus, the demand for oil and gas equipment causes an increase in demand for metal parts and electricity. In turn, the metallurgical works will increase the demand for ore; the power plants will increase the demand for natural gas, coal, etc. Thus, there is a number of investment impulses, which are very beneficial for the economic system.

Oil and gas complex is characterized not only by high and stable domestic and export demand for its products, but also creates a high level of demand for the products of the related sectors. The degree of related sectors development is characterized by a so-called multiplier index. The developed countries have the following multiplier indices: Norway – 1.6-1.7; Australia – 1.8-2.4; the USA – 2.1. Calculations show that the "oil and gas" multiplier is 1.9 in Russia; it corresponds to the multiplier indices of other oil-producing industrialized countries [9].

Thus, Russian revenues from the "engineering" line of the Shtokman gas condensate field (by placing orders with Russian contractors, carriers, etc.) can double the revenue of its similar "gas" line.

There is a growing demand for high technology, high-tech products of manufacturing industries due to the movement of oil and gas resource base to the Arctic shelf.

The main high-technology industrial potential of Russia is concentrated in the sectors of the military-industrial complex. Its conversion to the production of oil and gas equipment is associated with the decision of the key economic objectives – it is necessary to provide a guaranteed recoupment of investment in the production of equipment for oil and gas industry at the expense of hydrocarbons, which will be produced within the framework of the oil and gas development projects meeting the demand for the equipment. Consequently, the economic growth in the defense sectors and other "non-extractive" industries of the Russian economy depends on the extent and effectiveness of investments to the oil and gas projects.

Table 2. Characteristics of the multiplicative effect

Baseline characteristics	Multiplicative effect
Contents of the effect	It is a set of indirect influence effects over the regional economy; it is expressed in the ability of the complex to develop sectoral and inter-sectoral production to meet the demand for resources due to intra-regional demand for these recourses.
Forms of the effect	*Sales multiple* is generated by the use of common distribution channels and sales management from the single center
	Output multiple is arisen from the initiation of regional demand for the production resources. It takes stock of the necessity to develop sectoral and inter-sectoral production meeting this demand.
	Revenue multiple is expressed in the growth of wages, rent, profits and other income of the participants in the cluster
	Employment multiplier expresses the correlation of output growth and total employment in the region

All of these macroeconomic effects *(tab. 2)* are the components of economic multiplier effect, which was calculated firstly by the team of scientists under the leadership of A. Arbatov [2].

The multiplier denominates the existing economic relation between the individual sectors. The mining industry as a "generator" of the investment wave influences over other related sectors. If you have a good empirical base the multiplier makes it possible to determine the economic strength and the period of its validity in advance.

Multiplier effect weakens as the distance between a particular sector and the generator sector becomes longer and demand and profitability drop. This effect loses its effectiveness over time, it is quenched.

According to the logic of the market economy, a private investor seeks to maximize the direct economic effects taking into account the existing risks; the state should maximize the total economic and social effects taking into account the social, environmental and other constraints. A private investor and the state play their own game on three key issues: taxes, costs and profits [6].

Thanks to the multiplier macroeconomic effect is more powerful and longer in the long-sighted and rational system of taxation of private investment projects which include oil extraction. It is behind of the direct financial effect which is received by the direct participants of the project.

Thus, the time horizon of the state should be much more extensive than the time horizon of the commercial participants of the investment project. If the investors are interested in the returning of the invested funds as soon as possible without high risks, the state is interested to start a creative economic process and put off a direct budgetary effect if it is necessary. It allows you to find a rational combination of the zones of interest between the state and investors. However, in this case the state should refuse to meet a part of its ongoing interests in order to achieve the long-term economic objectives.

The state reduces the economical effect which is potentially achievable for the society in order to increase the direct revenues to the budget. This effect can be measured by the integral (total) economic effect of the project, determined by a combination of direct and indirect effects of the project and multiplicative effects generated by the previous effects [1, 6, 11].

Obviously, the more businesses will be involved in indirect participation in the oil and gas project, the greater the final effect will be. And the more the tendency of companies to invest, the greater macroeconomic effect will be. It is very important and difficult object of government regulation.

Based on the above, it is rightful to conclude that the most important strategic objectives of the government and the regional authorities concerning the regulation of subsoil use

in the oil and gas sector is to ensure sustainable and balanced development of oil and gas industry in the extracting regions and in the whole country. It is possible to achieve these goals by the use of the state methods and tools to regulate the economy in the conditions of market formation.

Thus, the multiplicative (indirect) effect in the realization of oil and gas projects is stipulated by the development of other industrial enterprises in the new extractive region. It means that investments in the cluster form the increment of consumption and revenues not only in the cluster, but also in other sectors of economy.

The magnitude of the multiplier is greatly affected by such features as population savings rate, current tax regime, the level of capital investment financing, government consumption from the state budget and non-budget funds, as well as a number of other macroeconomic indicators.

The longer chains of internal economic relations, generating the effect of multiple capital circulation and, therefore, the additional indirect economic activity, correspond to the larger value of the multiplier. For example, if the project is distinguished by a high share of added cost in its results and the resources (goods and services) which are consumed, as well as by higher wages of the staff and direct contracts, it usually means the strengthening of indirect economic effects and multiplier increase.

However, it isn't clear that such projects should be preferable. Although the oil and gas projects with a large share of fixed capital investments realized in Russia have lower values of the multiplier, but firstly, they create the necessary conditions for implementation of follow-up plans, creating a higher multiplicative effects(for example, oil development creates demand for transport services).

Secondly, large investment projects generate a significant absolute increase in indirect economic activity that facilitates the management of investments and creates good preconditions for the further economic growth.

Depending on the development level and other features, the internal investment market determines itself the optimum balance between different projects and makes the attractive investment climate.

In general, the efficiency in related industries can be measured through the multiplier using the following relation [4]:

$$Э = \sum_{i=1}^{n} M \cdot Э_i$$

where E – cumulative investment effect;

M – multiplier;

$Э_i$ – the secondary effect of the i-th sector from the basic industry investment;

n – a number of industries where the effect is obtained by the basic industry investment.

Huge reserves of hydrocarbon resources on the Arctic shelf allow us to speak about a significant rental potential for the country in spite of the remoteness and harsh climatic conditions, which raise cost of works in these areas. Prudent fiscal policy of the oil and gas field development in the North of Russia could become not only a profitable investment and source of rental income for the state, but also it can be the basis of regional socio-economic development.

The development of gas and condensate field in the Barents Sea and the laying of pipeline to the coast of the Murmansk Oblast will significantly contribute to the socio-economic development of the neighboring regions, in particular, the Arkhangelsk Oblast, which is one of the shipbuilding centers in Russia. Despite the production diversification occurred in the largest military enterprises of the Arkhangelsk Oblast and their reorientation to civilian purposes, the organizations were able to maintain

their high professional technical personnel and ability to work with high technology. As the largest shipbuilding center in Russia, Arkhangelsk and its transport companies would be able to supply the goods for the oil and gas projects to the Murmansk Oblast.

It is important to note that the resulting indirect effects exceed the direct cost in the economic aggregate.

Thus, according to the expert judgements, the implementation of the projects to develop the Arctic hydrocarbon resources and the effect of oil and gas industry development in the Murmansk Oblast will influence over the eight regions: the Murmansk Oblast, the Arkhangelsk Oblast, the Vologda Oblast, the Leningrad Oblast and St. Petersburg, the Republic of Karelia, the Republic of Komi and Nenetsia Autonomous Okrug. Not only extractive, but manufacturing and machine building North-West regions, building industry and power industry will feel the main effect of the oil and gas complex development. According to studies, every additional ruble of the oil and gas industry increases the GRP by 1.5 – 1.6 rubles [5]. An additional effect will be obtained in the form of tax base increasing, job creation, incensement of solvent demand, etc.

The world practice proves that during the realization of the oil and gas projects up to 80% of the total amount of work is the share of the enterprises that are suppliers of the oil and gas industry. These suppliers include service companies, large metal, construction, transport and other suppliers of materials, equipment and steel structures, as well as scientific and educational institutions which are representatives of various industries.

When we refer to oil and gas, most people think about big corporations, but only a few of them know that small companies also work on the shelf. Many important service and supplying companies on the shelf are the small businesses. Seven companies out of ten have fewer than 10 employees [8].

The emergence of a new oil and gas region in Russia determines the need for small business development in the oil and gas sector through the effective economic instruments aimed at creating and supporting of small and medium-sized companies in the oil and gas sector. The special feature of the organizational structure of the global oil and gas sector is the high role of small firms at the initial and final stages of exploration and development of the raw material provinces.

The development of large oil fields requires a significant amount of steel structures, equipment, paint-and-lacquer materials, special clothing, foodstuff, as well as construction, exploration, transportation, scientific researches and other kinds of works and services.

Oil and gas industry generates employment of hundreds of the related industries' enterprises. Currently oil and gas industry has an exclusive national economic and social importance because it predetermines the employment, and efficiency of economic relations, it strengthens the inter-regional relations and increases the tax base.

The maximum pulse rate of production capacities and capacity expansion should be a general approach of industrial policy to develop hydrocarbon fields in new extractive regions. This will allow the bulk of enterprises to restore the economic situation, establish financial management, settle with creditors and increase investment opportunities due to depreciation charges, as well as by increasing of their own profits for investment that will allow them to modernize the fixed assets and maintain them in working condition.

Oil and gas projects can involve the key industries which are related to intersectoral technological chains. Accelerated development of these chains will be a driving force for the allied industries, that is, they will stimulate the development of their suppliers, etc. The multiplicative effects will operate at the certain stage.

They are a kind of self-stimulation of economic growth. In fact, it is a stimulation of an upward spiral of production demand, and subsequently, investment and consumer demand. According to the results of many scientific studies, the domestic demand is the main and the most reliable engine of economic and social progress.

It is important that the industry creates the bulk of gross domestic product, as well as the fact that this industry determines the technical level of other sectors of the economy and social sphere, and, consequently, the positive dynamics of industry determines social development.

Obviously, the development of hydrocarbon resources in new regions should be socio-oriented in nature. It is necessary to use a comprehensive approach to solve the problems of the extractive territories, taking into account the specifics of formation, development and operation of the oil and gas sector in the region.

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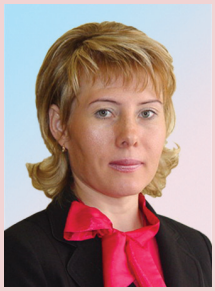
UDC 332.142.4(470.12)

Private public partnership in education: a model of human capital management

The article considers the issues of human capital use management as one of the most important fictitious assets which provides economic transition to the innovative way of development. The model of cooperation between regional authorities, business and higher educational establishments on the basis of private public partnership is proposed in the article. The implementation of the model will make it possible to provide prospective needs of innovative economy in highly skilled personnel in advance.

Human capital, human capital use, private public partnership in education, higher professional education, personnel training.



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Modern economies urgently need highly skilled personnel having not only the educational background, but also enterprise, innovative, creative aspirations and motives, able to acquire new knowledge and actively manage the innovation process. To address the key strategic objective of professional education – the ability to react in advance to the long-term needs of innovative economy – there should be a collaboration of the business community and educational institutions, joint work and pooling the efforts of government and administrative bodies, employers and educational institutions on the principles of public-private partnership.

In "the Concepts of long-term socio-economic development of the Russian Federation up to 2020" approved by the Russian Federation Government Decree № 1662-r dated November 17, 2008, "the Basic areas of activity of the Russian Federation Government until 2012 (including the list of implementation projects)" approved by the Russian Federation Government Decree № 1663-r dated November 17, 2008, and the program of anti-crisis measures of the Government of the Russian Federation for 2009, a public-private partnership (PPP) is defined as the basis for the development of economy and education system that is an

important condition for achieving the targets of socio-economic development of the Russian Federation.

Activities of PPP in education are regulated by a number of legislative acts[1], which define the principles of public-private partnerships:

- parity in the resources invested in the program of public-private partnership;
- parity responsibility of government and business for projects implementation;
- presence of equal leverage and control mechanisms on the part of business and government for the implementation of programs of public-private partnership;
- efficient use of resources invested by partners in the education system[2].

At the same time there is practically no systematic strategy for implementing PPPs in education, which is expressed by the following:

- absence of long-term strategies for development of industries and organizations;
- lack of clearly defined strategic priorities for PPP development;
- inability of representatives of the education sector to consolidate all the parties concerned to implement the planned programs and projects;
- undeveloped forms of "horizontal" partnership;
- predominance of interaction of executive authorities of the state with other social partners on the basis of the model of "managed democracy"[3].

In this regard, the study of the model of public-private partnership in education in the Vologda region has become the purpose of this article.

The ideology of the public-private partnership (PPP) is now quite widespread in the world. Public-private partnership, according to *V.G. Varnavsky*, is an institutional and organizational alliance between government and business in order to implement the socially significant projects and programs in a broad range of industries and R&D, up to the service sector[4]. In this case the necessary conditions of functioning of such an alliance are legality, clarity, transparency, reasonableness and acceptability of the rules of the game for both sides[5]. For the state the main reason for the establishment of public-private partnership is first of all an increasing need in services for the delivery of which the state is responsible[6]. They include higher professional education services demand for which has increased considerably in recent years. Since 2000 up to 2011 there was a positive dynamics of the number of university students and graduates. The values of these parameters per 10 thousand of the region's population were below the relevant data for Russia 1.3-fold, but comparable with those of developed countries (for example, the number of students per 10 thousand of the population in France was 360 people, in the UK – 380, and in Finland – 590)[7]. This suggests that the region has good potential to increase the number of specialists with higher education. The proportion of students in the economically active population (per 10 thousand population) which

[1] Federal Law "On autonomous institutions" dated November 3, 2006 No. 174-FL; Federal Law "On concession agreements" dated July 21, 2005 No. 115-FL; Russian Federation Government Resolution "On approval of the model concession agreement in respect of educational objects" dated 11 November 2006 No. 671; Federal Law "On the order of formation and use of target capital of nonprofit organizations", dated December 30, 2006 No. 275-FL.

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Table 1. Number of university students per 10 thousand of economically active population, people

Territory	Year								
	1995	2000	2004	2005	2006	2007	2008	2009	2010
The Russian Federation	375	587	803	815	827	826	820	993	983
NWFD	404	652	827	841	848	858	841	981	941
The Vologda region	285	453	653	635	645	684	656	765	741

Source: Key indicators of regional development of the North-West Federal District. 2009: stat. coll. Vologda, 2009; Russia in figures. 2011: stat. coll. Rosstat. M., 2011. 581 p.; authors' calculations.

is one of the direct characteristics of the intellectual potential of the area increased between 1995 and 2011 more than 2.5 times on average both in Russia (from 375 to 982 people) and in its regions *(tab. 1)*.

Public-private partnerships in education is co-operation between the state / municipal government, educational institutions and businesses to implement projects in the field of education by pooling resources and sharing risk, revenue and expenses. Relationships of PPP parties are partner, equitable in nature and recorded in the documents (agreements, contracts, etc.). Participants in public-private partnerships have right of ownership for the used partnership assets and other proprietary rights, pool their resources to achieve the objectives of the project (program) of the public-private partnership, and then share the responsibilities and risks.

The strategy of socio-economic development of the Vologda region for the period till 2020 defined the purpose of regional system of professional education: addressing the needs of socio-economic complex of the region for skilled personnel and specialists. In this regard, the region adopted the Law "On primary and secondary education"[8] and it proceeded to create a multi-level system of public-private partnership. Its main institutional mechanism in professional education are coordinating councils for training (industrial, municipal), and the supervisory boards of trustees of educational institutions.

Currently there are:

- the regional coordinating council for personnel and specialists training at the first vice-governor of the region,
- six industry councils for the following areas: engineering and metal processing, construction, forestry complex; agriculture, trade, services, roads and transportation, education,
- seven municipal councils for personnel training (in the cities of Cherepovets and Vologda, the districts of Veliky Ustyug, Totma, Sokol, Vytegra, Gryazovets)[9].

Coordinating councils have become a discussion and negotiation platform for business leaders, heads of educational institutions and relevant departments of problematic issues of training for the regional market.

In addition, the regional government in February 2011 decided to establish a regional system for forecasting staffing requirements for the medium and long term.

The legal basis for the organization of systemic partnership of government, business and vocational training was formed with the participation of the Union of Industrialists and Entrepreneurs: the documents governing the interaction between educational institutions and organizations of employers in training, fixing the educational institution at basic institutions (provision of basic organization, form of cooperation agreements, etc.) are developed and implemented. As part of the coordinating councils' work there are discussions of the

[8] The Law of the Vologda region "On primary and secondary professional education in the Vologda region" dated 16 January 2007. No. 1553-OL.

[9] A public report on the status and performance of the education system of the Vologda region for academic year of 2010/2011. Available at: http://www.edu35.ru/

issues related to the development of regulatory frameworks to ensure a favorable tax treatment for employers who invest in the vocational education system.

However, higher education institutions drop out of the PPP area, while in developed countries they are increasingly seen as key partners in federal and regional authorities in implementing the policy of socio-economic development of territories. This is the system of higher vocational education which is building an educational process based on scientific research, is designed to train specialists of a new formation ensuring the establishment of innovative economy, so the "university – enterprise" alliance should become the focus of efficient generation and use of human capital in the region.

It is important to include such an important segment of the regional market as small and medium business, which also remains aloof, into the system of public-private partnerships.

Management model of the region's human capital use for its innovative development based on public-private partnership is schematically represented in *figure 1.*

The implementation of this model is possible in each of the priority industries of the region: mechanical engineering, textile and linen industries, timber industry, etc. For this purpose, the authors believe is necessary to concentrate the industry around one strong institution of higher education (or several if the programs of secondary and higher education are implemented by different institutions) with the active support of the Regional Government.

These entities have their own interests, but these priorities and objectives are coherent, and their interaction has a synergistic effect on the development and effective utilization of human capital in the region *(fig. 2)*. Each of the partners in this model is supposed to fulfill the functions assigned to it.

Figure 1. Model of human capital management in the region based on public-private partnership

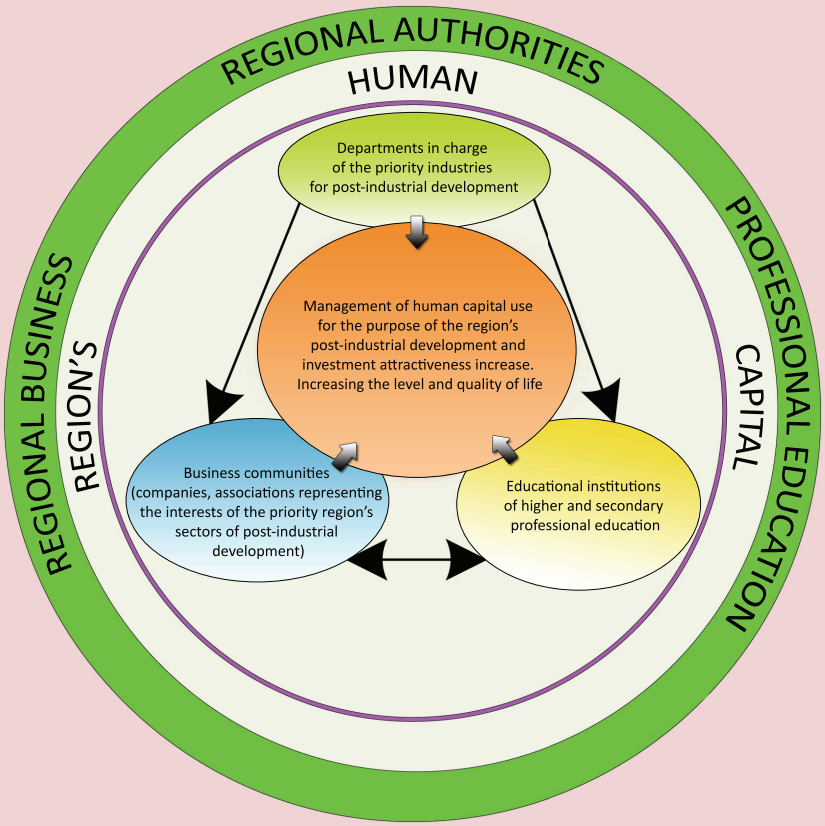
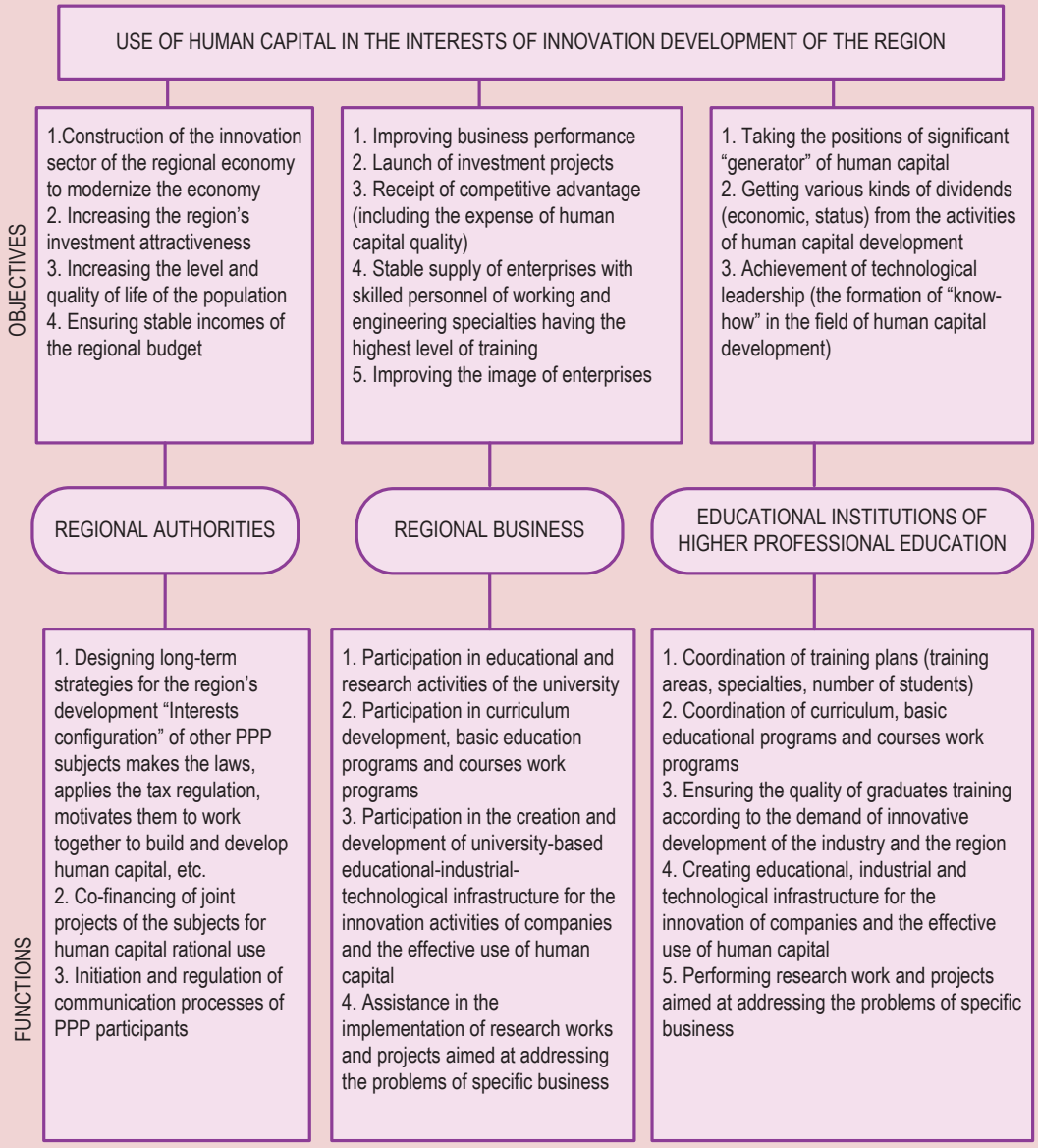


Figure 2. Objectives and functions of public-private partnership participants in education in the interests of the region's innovative development



Thus, the functioning of the PPP is a combination of public and private interests and competencies, which, on the one hand, allows the authorities to solve urgent problems of the region with the financing of infrastructure projects and social programs, on the other it makes it possible for private business to invest and get interested in its profits. Public-private partnerships allow avoiding both drawbacks of direct regulation of the state, and "marketing failures".

The instruments of public-private partnership able to adjust personnel training mechanism to address specific production problems are targeted training institute and federal target allocation of budget places in universities and federal institutions of secondary vocational education. The resolution of the Government of the Vologda region "On the procedure for determining the size and structure of the reception of students at the expense of the regional budget in the educational institutions

of secondary and higher education" No. 1371 dated December 27, 2005 defied an additional mechanism of target contract training. However, the analysis of the order execution shows the insufficiency of legal mechanisms contributing to the employment of graduates in accordance with the trust agreement (the proportion of employed "targetists" of VSPU is 22%). In addition, in some cases there is a passive attitude of universities to interact with companies and organizations to implement the mechanism of targeted training. As can be seen from *table 2* Vologda universities have performed the federal quota and targeted training on contracts with companies provided only 82% of the quota.

Another tool of PPP is the institution of "social partnership". Thus, the paradigm of relations in the Vologda region in primary vocational training is built up as numerous connections of NPO institutions with various enterprises, institutions and organizations.

One of the directions of social partnership implementation is the organization of labor market research by the department of education. Employers and educational institutions agree on targets for admission to professional educational institutions.

Thus, analysis of the situation on the labor market has shown significant differences between the interests of enterprises of different ownership forms that in some way affect the cooperation with them. Large enterprises such as OJSC "Severstal", OJSC "Cherepovets Steel Rolling Plant", Vologda Branch of the Northern Railway, OJSC "Vologda bearing plant" and others which are traditionally the partners of educational institutions of professional education, are constantly responding to the offers of cooperation. This is explained by the fact that they are in need of workers and specialists which is due to weak attraction of the job which they offer in the labor market. At the same time there is lack of organization of employers engaged in small-and medium-sized businesses, as well as their mistrust of the quality of professional training that cannot establish a dialogue with this category of employers quickly and effectively. However, in this area there are examples of preparedness for various forms of cooperation, primarily in enterprise trade, catering and domestic services.

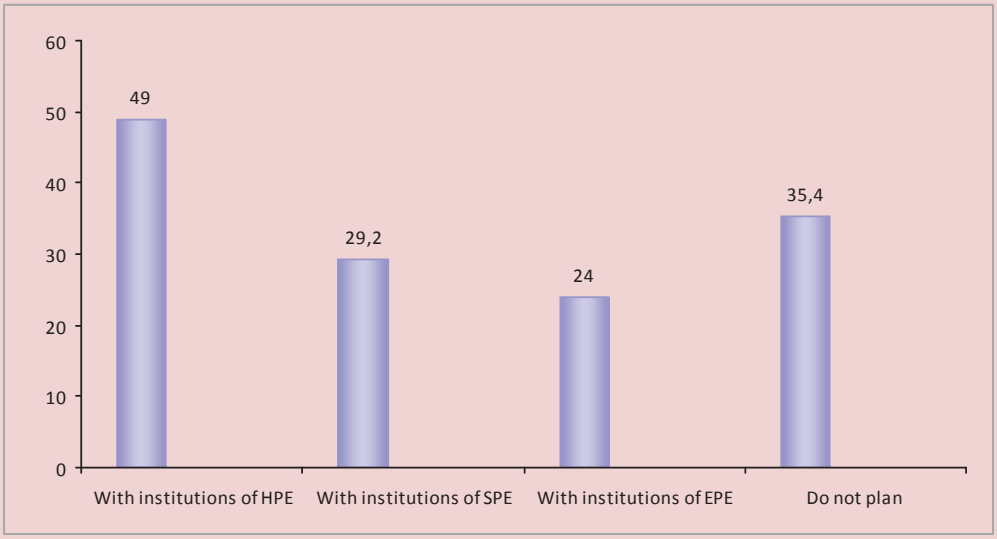
However, the share of organizations and companies planning to expand (start) collaboration with institutions of professional education is not more than 50%, and the fact that 35% of com-

Table 2. Target admission by the federal quota and by contracts with agencies and organizations to the universities in the Vologda region in 2009, pers

University	Number of places		Quota fulfillment		fulfillment %	
	by the Federal quota	by contracts with agencies and organizations	by the Federal quota	by contracts with agencies and organizations	by the Federal quota	by contracts with agencies and organizations
Vologda Institute of Economics and Law	410	-	464	-	113.1	-
Vologda State Pedagogical University	-	212	-	114	-	54
Vologda State Milk Academy named after N.V. Vereshchagin	165	60	165	60	100	100
Vologda State Technical University	57	-	43	-	75.4	-
Total	632	272	672	174	106.3	82

Source: The concept of Personnel Policy of municipality "The City of Vologda" up to 2020 "Vologda is a city of professionals" [Electronic resource]: adopted by the Resolution of the Administration of the city of Vologda dated 28.09.2010 No. 5165. Available at: http://vologda-portal.ru

Figure 3. The share of organizations and companies planning to expand (start) cooperation with institutions of professional education, %



Source: data of expert survey of business leaders and organizations in Vologda, conducted by ISEDT RAS.

panies surveyed in 2007 – 2008 do not plan to cooperate indicates the incomplete effectiveness of the institute of "social partnership" *(fig. 3)*.

At present, based on one of the elements of the Scientific and Educational Center – the Vologda Branch of SPbSUEE – the legal and institutional issues on building of the state educational institution of the Institute of Regional Development (IRD) are being worked out where the regional government can act as the founder, and the Russian Academy of Sciences can give the scientific leadership. The purpose of the Institute's activities is targeted training of highly qualified specialists ordered by the regional and municipal governments, business entities, that is, training of the regional administrative elite. The project implementation of the Institute is nothing but a form (model) of the management organization of human capital for innovation development of the industry of mechanical engineering of the region as a whole[10].

IRD creation provides:

- integration of scientific and educational complex with businesses of the region to carry out joint activities on the development of professional competencies of graduates and the construction of an effective mechanism of interaction between university science, business and government, the formation of effective scientific and educational space[11];
- scientific and methodological support for continuing education;
- integration of scientific and technological potential of the region;
- creation of a network of strategic partners who are interested in mutually beneficial cooperation in the field of personnel training;
- sustainable development of the region and enhancing its investment attractiveness;
- raising the level and quality of life in the region.

[10] Ilyin V.A., Gulin K.A., Uskova T.V. Intellectual resources as a factor of innovation development. Economic and social change: facts, trends, forecast. 2010. No. 3. P. 14-25.

[11] Leonidova G.V. On the problem of formation of the regional scientific and educational environment. In: Bulletin of ENGECON. St. Petersburg, 2010. No. 1 (36) "Economics". P. 134-142.

Figure 4. The project of the Institute of Regional Development (IRD)

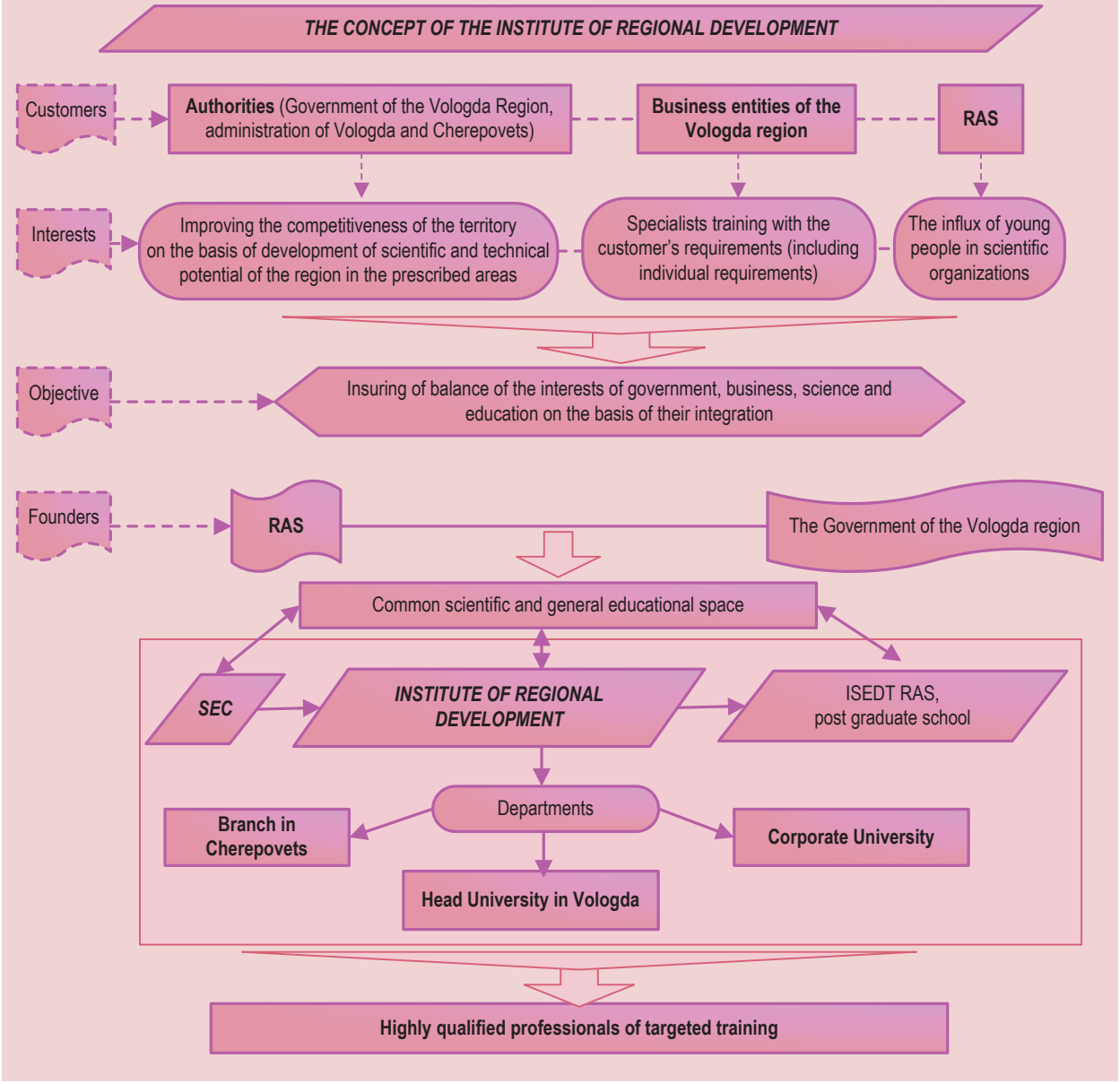


Figure 4 presents a scheme of IRD functioning in the case of engineering industry, which is the basis of innovation development of the region's economy

As part of IRD activities the partners, i.e. the subjects of human capital use management are:

- Department of Industry, Science and Innovation Policy of the regional Government;
- Association "Machine-building enterprises of the Vologda region";
- Scientific and educational complex, the core of which is the Vologda branch of "Saint-Petersburg State University of Engineering and Economics" (ENGECON).

In the proposed model the cooperation of participants of public-private partnership is possible in the following areas:

Department of Industry, Science and Innovation Policy of the regional Government;

I. Department of Industry, Science and Innovation Policy of the regional Government

– *the Vologda Branch of SPbSUEE*: through active research policy the Department manages the IRD providing the branch with government orders and grants, allocation the funds for development programs, direct budget financing of projects aimed at developing and efficient use of the region's human capital.

II. Department of Industry, Science and Innovation Policy of the regional Government – Association "Machine-building enterprises of the Vologda region": the Department motivates companies to cooperate by forming favorable tax treatment.

III. Association "Machine-building enterprises of the Vologda region" – the Vologda Branch of SPbSUEE: the Association is involved in efforts to ensure the quality of personnel training (development of curriculum, core educational programs, course work programs). It takes part as a final consumer of educational services in the work of the state certification committee of the university, co-finances the development of university-based educational-industrial-technological infrastructures for innovation of the industry and the efficient use of staff through their involvement in the implementation of research and development.

The Coordinating Council can coordinate the project, its functions are completely in tune with the current branch of personnel training council of the Vologda Oblast (in the direction of machine-building), and which currently regulates the interaction of businesses with educational institutions of primary vocational education. The composition of this body, in our opinion, may include representatives of all PPP participants: from the Department – responsible persons in charge of the region's machine-building complex, from the Association – companies representatives responsible for staffing and execution of R&D, from the university – the branch Director, deputy Director for Science and head of the issuing department.

Today there is the development of current and future (on medium and long term) plans of IRD development which reflect the structure, scope and quality of personnel training, development of educational, industrial and technological infrastructure and modernization of training facilities of the Branch, professional development of the teaching staff, etc.

It seems that the Institute of Regional Development has to become a center of the modern system of continuing business education in the Vologda region, which is ensured by the following:

- programs of higher professional education for training of innovative managers and engineers;
- program of secondary professional education for training of mid-level professionals (product engineers, etc.);
- Center of Continuing Education implementing training and retraining programs for the existing staff of enterprises;
- Youth Scientific and Innovation Center, a key element in the educational and industrial and technological infrastructure of the project, a kind of resource base with modern logistics equipment and providing the possibility of realizing the human potential of talented young people to form a critical mass of human capital capable of solving the problem of improving the territory's competitiveness;
- Center of prevocational training providing target work with talented youth.

The experience of the Vologda branch of SPbSUEE and ISEDT RAS will contribute the project implementation in individualization of the educational process at the first stage – the Scientific and Educational Center (SEC), which has been operating in the region since 2003 on the basis of ISEDT RAS[12],

[12] Leonidova G.V. Generation of talented youth's knowledge for the benefit of intelectualization of human capital: the methods and forms. Economic and social change: facts, trends, forecast. 2011. No. 13. P. 90-100.

in particular such forms of work with talented children and youth as:

- the system of remote, part-time training and consulting of gifted children and talented youth with opportunities for educational, scientific and innovative structures of the university;
- summer camps for gifted and talented young people;
- practice for the students of the Branch and the SEC to establish early contact with prospective employers of the city;
- participation of students of the Branch in foreign internships;
- students' and teachers' academic mobility and participation in international exchange programs;
- creation of the Branch's basic chairs in ISEDT RAS.

The proposed approach will allow the region's administration to decide the priorities of its innovative development through rational use of such intangible assets as human capital. The project is in compliance with the directions of the Long-term Target Program "Integrated development of professional education system in the Vologda region for 2011 – 2015":

1. Improving the forecasting of staffing needs of the regional economy, formation and distribution of government order for the training of personnel, including the creation of the regulatory framework of formation of state order for regional professional education system based on which the volume and direction of training in professional educational institutions will be determined.

2. Increasing demand for the graduates of professional education at the regional labor market through the organization of information and career guidance campaigns to professions and occupations of priority sectors of the economy; concluding contracts with organizations for training, retraining and skills development; career guidance, increasing the prestige of working occupations and professions which are in demand in the labor market.

3. Establishing an effective territorial and industry organization of resources of primary and secondary vocational education by building the optimal structure of vocational education institutions, the organization of effective networking of professional educational institutions at all levels (school / NPE / SPE / HPE) and their co-operation with the employers (the equipment of new resource centers of professional education in priority areas of the region's economic development: construction, engineering and metalworking, agriculture, forestry and wood systems, etc.; upgrading the content of vocational education to meet the needs of regional labor market and employers' requirements).

The expediency of this is due to the following: first, these mechanisms will provide to coordinate both educational and scientific activity for the solution of practical problems facing the regional economy, second, the possibilities for improving the quality of training and competitiveness of scientific and educational institutions will expand significantly, and third, there will be the prerequisites for the transition to innovation-oriented economy.

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UDC 338.436.33(470. 13-22)

Sustainable agricultural sector development of the North zone: state, factors, directions*

The paper analyzes the sustainability of agriculture in the northern territories of the pre-reform and transition period. It shows the impact of the agrarian reform on the dynamics of crop and livestock production, changes in production capacity, considers the indicators of food consumption by the population of territories of the North, the financial condition of agricultural organizations. It estimates the impact of the priority national project "Development of Agriculture" on the sustainability of the agricultural sector. It reveals the factors and conditions that constrain the sustainable development of agriculture. The package of measures is offered to ensure sustainable development of the agricultural sector, including the updating of agricultural legislation, modernization of production through the application of new technologies, increasing state support for agricultural producers.

Stability, sustainable development, agriculture, market transformation, innovations, state support, the North.

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The sustainable development of the agricultural sector and rural areas is a part of the overall problem of sustainable human development.

In accordance with the decisions of the World Summit on Sustainable Development in Johannesburg (2002) from December 2005 – 2014 there is a transition of the world community towards sustainable development. Each country, according to the Plan of Implementation of the Summit should promote sustainable development by adopting and enforcing clear and effective laws that support sustainable development, and implement other measures to strengthen the institutional framework [1, p.186]. In 1996 the President of Russia, based on recommendations of the UNO, adopted a decree "On the Concept of Transition of the Russian Federation to Sustainable Development".

* This research was carried out as a part of RSSF project "The concept and economic gear of innovation development of agricultural business of the northern region» No. 11-12-11003 a/C.

The concept seeks to "implement in the Russian Federation the gradual transition to sustainable development, providing the solution of social and economic problems and problems of preservation of favorable environment and natural resources to meet the needs of present and future generations".

The need to move agriculture in the North Zone for sustainable development is due to build-up of production of local food products, supplying the population with ecologically safe products produced in this macroeconomic region and other parts of the country as well, the solution of employment problems of the indigenous population, increasing standards of living of the peasant community, a stable and balanced nature management.

At present, agriculture in the North Zone is characterized as unstable. In this regard, the development of science-based measures complex, aimed at stabilization and sustainable development of northern agriculture, is becoming an important and urgent task.

Analysis of sustainability of agriculture in the pre-reform period

In the history of agricultural development of northern territories 1960 – 1980-ies were the most favorable. The analysis of the dynamics of the efficiency of agricultural production for 30 years with the help of regression equations showed that in the European North the average growth of gross output per capita amounted to 1.5%, the unit of land – 4.4, and productivity in the public sector – to 5.7%. Moreover, these figures were higher here than the North-West economic region, respectively, 0.9, 1.3 and 1.1 percentage points.

The dynamics of crop and livestock production in 13 territories, which are all included of the Far North and equivalent areas, showed that the average annual production of vegetables in 1986 – 1990 compared with 1971 – 1975 increased by 19%, milk – by a quarter, and meat – almost twice, eggs – by 2.6 times.

In the pre-reform period the share of the European North accounted for over half (54%) of agricultural production in the North Zone. Changing production volumes in the pre-reform period is shown in *figures 1 and 2.*

The strategy of agricultural development in the pre-reform period was determined by the intensification on the basis of strengthening its material-technical base. The development of material-technical base was achieved by the investment policy. As can be seen from the data for 1976 – 1990, investments grow in Russia as a whole, and in the regions, except the Murmansk region *(tab. 1)*.

Much work has been done on the mechanization of crop and livestock production. Particularly great progress has been made in terms of comprehensive mechanization in farming. Only the Republic of Yakutia had a low level of comprehensive mechanization in farming *(tab. 2)*.

In the pre-reform period in the agricultural sector of the North were introduced crop rotations, new crop varieties, new technologies of their cultivation, measures to improve soil fertility, science-based farming systems, intensive forage production systems, advanced fodder technologies, mechanized seed and herbs production technologies.

In livestock farming near the cities the construction and development of cattle-breeding complexes and poultry farms were in progress. During these years in many regions of the North was almost solved the problem of ensuring the needs of the population in eggs. It was promoted by the translation of the industry on an industrial basis.

Consumption indicators of food by the residents of the northern territories approached and for some territories exceeded the national average *(tab. 3)*. In 1991, the share of local resources in the formation of food stocks, such as in the Komi Republic, reached 94% for potatoes, vegetables – 21, milk – 48, meat – 40, eggs – 91%.

Figure 1. Crop production in all categories of farms in the regions, which territories are fully included in the North Zone, thousands of tons

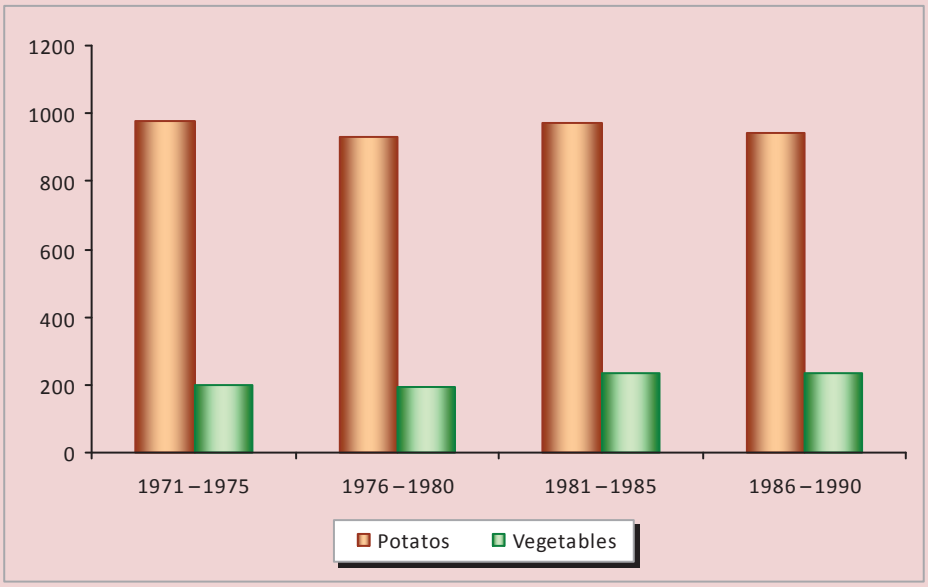
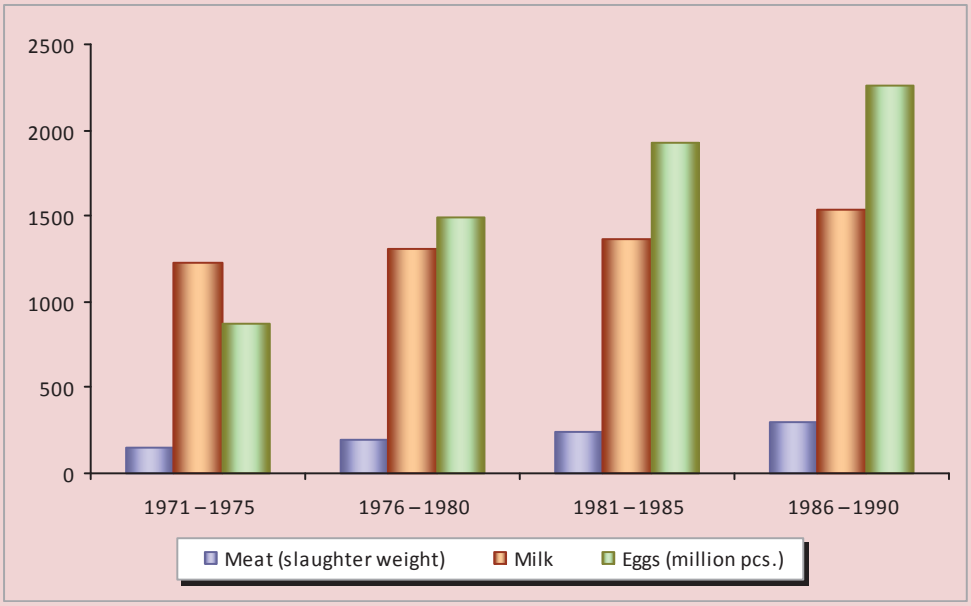


Figure 2. Livestock production in all categories of farms in the regions, which territories are fully included in the North Zone, thousands of tons



There were positive changes in the approximation of conditions and living standards of urban and rural populations, as well as in pricing based on the increase in purchase prices for agricultural products and financial status of farms. In 1990, all state and collective farms were profitable *(tab. 4)*. The level of profitability was consistent with the optimal rate (40 – 50%), allowing to carry out the process of expanded reproduction. Products of traditional industries had high level of profitability, especially the meat of deer. In 1990, the profitability of deer meat in the Yamalia Autonomous Okrug was 426%, the Nenetsia Autonomous Okrug – 424, the Komi Republic – 324, the Chukotka Autonomous Okrug – 274, the Republic of Sakha (Yakutia) – 208%.

Table 1. Capital investment in agriculture*, millions of rubles

Republic, region	Years of 1976 – 1980	1981 – 1985	1986 – 1990	1986 – 1990 to 1976 – 1980, %
RSFSR, bln. rub.	121.5	138.6	173.8	143
Non-Chernozem zone	41.4	46.5	57.2	138
Karelia Republic	390	431	625	160
Komi Republic	447	486	615	138
Arkhangelsk region	1016	1131	1450	143
Murmansk region	805	611	772	96
Tuva Republic	375	376	468	125
Sakha Republic (Yakutia)	636	896	1613	254
Kamchatka region	684	877	1293	189
Magadan region	403	547	766	190
Sakhalin region	795	892	1403	176

Source: The development of agro-industrial complex of the RSFSR: stat. book. Goskomstat of the RSFSR. M., 1991. P. 79, 80.
* Territorial units are given in the present status.

Table 2. The level of mechanization in agricultural regions, which territories are fully included in the North Zone (1990), %

Republic, region	Vegetables planting	Potatoes combining	Comprehensive mechanization level in farms and complexes		
			cattle	milk	pig-breeding
Karelia Republic	99	29	59	76	57
Komi Republic	91	38	54	75	80
Arkhangelsk region	82	83	54	76	85
Murmansk region	50	22	59	64	86
Tuva Republic	49	36	35	71	75
Sakha Republic (Yakutia)	49	26	5	12	55
Kamchatka region	93	60	93	95	90
Magadan region	97	37	75	94	85
Sakhalin region	89	3	62	79	74

Source: The development of agro-industrial complex of the RSFSR: stat. book. Goskomstat of the RSFSR. M., 1991. P. 89, 90.

Table 3. The consumption of main types of food products per capita in 1990, kg

Indicator	Meat and meat foods	Milk and dairy products	Eggs, pcs.	Potatoes	Vegetables, melons and gourds	Sugar	Bread products
Science-based norm	88	440	290	110	140	43	110
RSFSR	75	387	297	106	89	47	120
Karelia Republic	57	375	321	82	75	42	111
Komi Republic	72	402	294	97	92	56	118
Arkhangelsk region	61	363	295	65	71	49	113
Murmansk region	67	390	249	61	75	50	69
Tuva Republic	58	299	222	44	49	46	126
Sakha Republic (Yakutia)	80	433	267	74	82	56	109
Kamchatka region	82	342	285	58	101	58	94
Magadan region	100	412	258	87	114	54	96
Sakhalin region	74	378	318	86	116	61	127

Source: Regions of Russia. Socio-economic indicators. 2008: stat. book. Rosstat. M., 2008. Pp. 194-201.

Table 4. The level of profitability, unprofitability (-) of production in the farms of regions, which territories are fully included in the North Zone (1990),%

Republic, region	Agriculture	Plant growing	Livestock
Karelia Republic	44	14	16
Komi Republic	44	22	46
Arkhangelsk region	51	43	51
Murmansk region	48	13	51
Tuva Republic	41	-14	44
Sakha Republic (Yakutia)	152	-3	168
Kamchatka region	69	25	76
Magadan region	68	-18	77
Sakhalin region	46	24	50
Source: The development of agro-industrial complex of the RSFSR: stat. book. Goskomstat of the RSFSR. M., 1991. P. 306, 307.			

Budgetary provisions had a significant impact in the sources of expanded reproduction. For example, in the Komi Republic, for 1976 – 1980 the average share of the state budget in the sources of the capital stock and growth of working capital was 43%, for 1981 – 1985 – 37, for 1986 – 1988 – 31% [2, p. 148].

The most important direction of the social policy in the pre-reform period was the convergence of conditions and living standards of urban and rural populations. Steadily increased total income of rural families, their level was gradually approaching the urban settings. In the Republic of Komi, for example, in 1989 the total income for rural families was 82.5% compared to the urban family, and the average total income of rural residents to the level of citizens – 72.4%. Average monthly wage of agricultural workers was 236 rub., on the whole national economy – 282 rub., in the industry – 325 rub., construction – 333 rub., transportation – 327 rub. [3, p. 21]. There was a clearly discernible trend towards higher levels of provision of rural population with different kinds of services and social amenities, comprehensive development of the central estates farms as base stations in rural areas was carried out.

Thus, the agricultural policy in the pre-reform period, aimed at accelerating the pace of intensification and industrialization of agricultural production, improving living standards of peasants, promoted the economic and social stability of the agricultural sectors of the North Zone. In the early 1990-ies in the North the minimum necessary amount of food necessary for sustainable livelihoods was produced.

The consequences of market reforms on the stability of agricultural economy

In the course of market reforms in the countryside there are conflicting socio-economic processes. In recent years, were largely created the legal and organizational conditions for the functioning of various forms of ownership and management, including the foundations of market mechanisms. The state monopoly on land was abolished. The vast majority of agricultural production and the entire field of processing and marketing of agricultural products have been privatized. Agricultural producers have the right to choose forms of management, complete freedom in the implementation of their products, the acquisition of material resources and the use of proceeds.

Currently, most villagers have gained ownership on the land. The property right was transferred to the peasants for property and land shares, the size of personal land was increased and restrictions on private farming, housing and homestead construction were removed. Access to land is open to residents. In terms of economic restructuring, and the associated increase in the number of unemployed,

deteriorating financial situation, granting citizens with the ground for conducting a commodity and a household is an important element of social protection.

A new socio-economic structure of agricultural production, characterized by the presence of private, collective and individual legal organizational forms of management was created. Currently in the North Zone a collective, private plots, peasant-farming way of life is operating. A variety of legal forms was formed: industrial and agricultural cooperatives, business partnerships and companies, state unitary enterprises and private farms.

The transition to a market economy was accompanied by a reduction in agricultural production especially livestock. Over the years 1990 – 2009 meat production decreased by 3.3, milk – by 2.5, eggs – by 2.2 times *(fig. 3)*.

Falling production has identified the reduction of consumption of local foods. For example, in the Komi Republic for 1990–2010 percentage of local food consumption in relation to science-based consumption rates decreased for meat and meat products from 34.7 to 22.5%, milk and dairy products – from 37.7 to 15.5, eggs – from 101.4 to 97.9 %. Despite the significant import in regions of the North of food, food consumption is now lower (except meat and meat products, potatoes, vegetables and melons, bread products in a number of territoties) *(tab. 5)*.

During the years of reforms occurred the degradation of production potential. Sown areas for 1990 – 2009 decreased from 1055.6 thousand hectares to 324.7, the number of cattle decreased from 1599.7 thousand to 567.9 thousand head, including cows – from 603.3 to 241.4, pigs – from 1144.4 to 221.4 thousand, deer – from 2260.3 to 155.3 thousand head.

In plant growing there is deterioration of agrochemical and hydrophysical properties of soils, increase of waterlogged and bushing lands in connection with the destruction of drainage systems and reduction in land reclamation. Drastically reduced application of mineral and organic fertilizers.

There is organizational, technical and technological backwardness of the industry. Tractors park of all brands in agriculture, such as of the Komi Republic for 1990 – 2010 decreased from 5477 pcs. to 971, the amount of generating capacity – from1507.9 thousand HP to 293.7. There is a reduction of tractors and power facilities on 100 hectares of crops, while increasing area of farmland per 1 worker *(fig. 4)*. A similar situation in other regions of the North.

Figure 3. Livestock production in all categories of farms in the regions, which territories are fully included in the North Zone for 1990 – 2009, thousands of tons

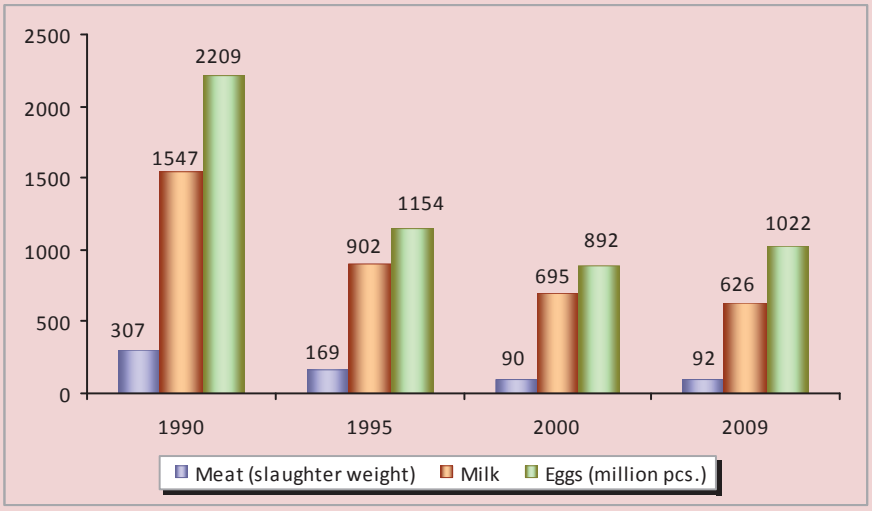
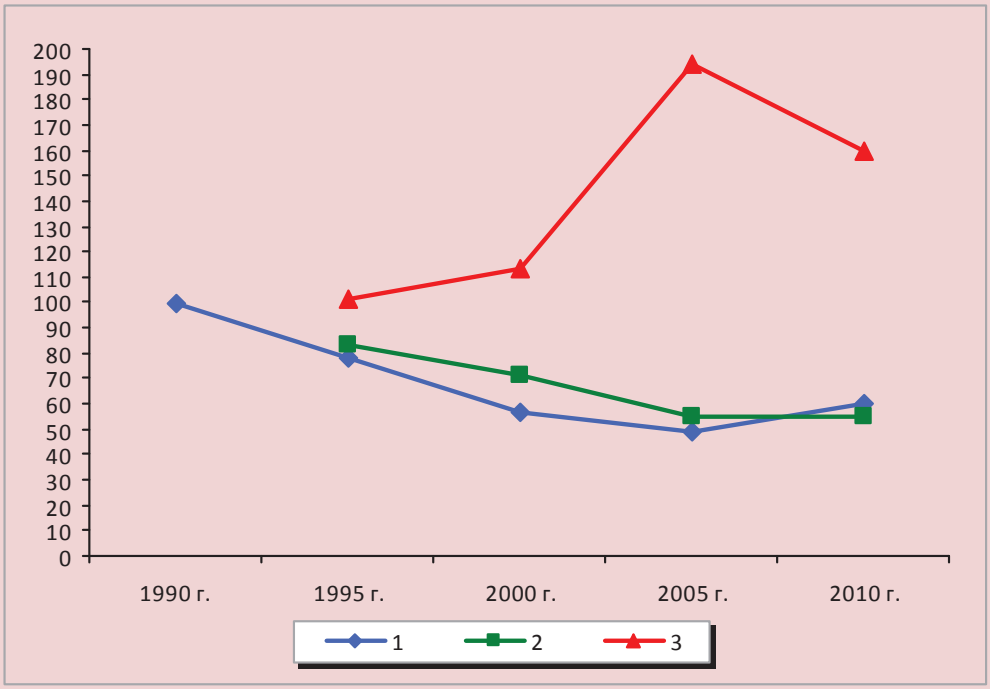


Table 5. The ratio of consumption of basic food products per capita in 2009 to 1990, %

Country, region of the Federation	Meat and meat foods	Milk and dairy Products	Eggs pcs.	Potatoes	Vegetables and melons	Sugar	Bread products
Russia	89	64	88	107	116	79	99
Karelia Republic	114	63	74	124	115	98	105
Komi Republic	99	58	86	56	90	68	92
Arkhangelsk region	82	44	83	112	104	80	96
Murmansk region	97	61	89	115	154	70	139
Tuva Republic	95	56	37	218	78	52	105
Sakha Republic (Yakutia)	109	66	77	112	88	63	123
Kamchatka region	79	44	54	155	96	57	103
Magadan region	69	53	74	78	70	65	114
Sakhalin region	116	54	68	131	76	52	81

Calculated: 1. Regions of Russia. Socio-economic indicators. 2008: stat. book. Rosstat. M., 2008. Pp. 194-201.
2. Regions of Russia. Socio-economic indicators. 2010: stat. book. Rosstat. M., 2010. Pp. 200-207.

Figure 4. The changing of the availability of agricultural land, tractors and power capacities in agriculture of the Komi Republic, 1990 = 100%: 1 – power capacity for 100 ha of crops, 2 – tractors per 100 hectares of crops, 3 – agricultural grounds for one employee



In the agricultural organizations of the North was violated the principle of self-sufficiency and self-financing. Over the past three years the share of unprofitable organizations ranged from 30 to 42. The level of profitability is 4–5 times lower than normal, necessary for the implementation of expanded reproduction.

Extremely low remains the level of profitability of livestock production, the leading industry in the region. Beef production is unprofitable. The data on the level of profitability (unprofitability) of agricultural organizations in the regions, which territories are fully included in the North zone, shown in *table 6*.

Table 6. The level of profitability (unprofitability) of economic activity of agricultural organizations, %

Country, region of the Federation	Of all economic activities				Of crops production				Of livestock production			
	Year of 2005	2006	2007	2008	2005	2006	2007	2008	2005	2006	2007	2008
Russia	8.1	10.3	16.2	14.5	20.5	27.2	48.5	38.6	10.7	10.6	10.9	12.4
Karelia Republic	6.1	1.3	0.6	2.8	42.5	21.2	18.2	8.3	5.3	5.1	5.1	2.4
Komi Republic	5.5	8.1	7.6	15.8	7.5	6.0	8.3	9.7	3.9	12.7	10.6	15.5
Arkhangelsk region	-2.6	1.1	14.6	17.3	-3.8	22.0	19.4	22.4	-1.3	2.4	10.4	6.7
including Nenetsia AO	10.0	11.0	16.7	18.0	-28.7	-26.3	-6.9	-	8.0	16.0	13.7	15.5
Murmansk region	7.7	7.4	-0.5	2.5	49.7	22.1	33.3	13.5	12.6	17.0	13.8	8.3
Khantia-Mansia AO	-2.6	-9.5	3.9	5.3	-10.3	10.4	-0.7	-20.5	-5.2	-16.6	14.9	-8.5
Yamalia AO	-20.0	-11.6	17.8	22.4	-2.2	-	-34.9	-	2.6	7.1	0.4	41.7
Tuva Republic	-15.9	-7.6	1.6	0.6	-14.3	-15.0	-20.7	-15.6	-6.4	3.6	19.8	19.5
Sakha Republic (Yakutia)	6.3	2.6	10.4	11.9	33.4	12.5	37.9	48.6	15.0	21.0	11.9	20.6
Kamchatka region	12.3	14.4	2.8	14.3	44.9	32.2	15.2	61.7	12.6	18.5	-2.3	15.4
Magadan region	-2.7	-5.0	-13.5	-22.3	29.2	60.7	440.5	13.6	-22.7	-12.0	0.5	-7.7
Sakhalin region	3.8	4.4	8.1	15.1	32.9	34.8	33.7	40.0	-9.0	-4.1	-4.8	-4.2
Chukotka AO	118.6	145.0	150.9	72.2	-46.8	-30.4	-14.0	-19.9	89.4	71.6	100.1	-38.2

Source: Agriculture, hunting and forestry in Russia. 2009: stat. book / Rosstat. – M., 2009. – Pp. 406-407, 410-413.

The analysis of financial sustainability of agricultural enterprises in the Republic of Komi in 2009 showed that almost two-thirds (62%) of companies are financially stable. These organizations have the disadvantage of the total value of all sources for the formation of reserves and costs.

Positive changes in agriculture in the Northern Zone occur in connection with the implementation, since 2006, the national project "Development of agriculture", transformed into "The state program of agricultural development and regulation of agricultural products markets, raw materials and food for 2008 – 2012". The project is aimed at accelerating the development of livestock and promoting the development of small farms. For the implementation of measures for the development of animal husbandry are allocated budgets to subsidize interest rates on investment credits taken for up to 8 years for the construction and modernization of livestock farms.

The priority directions of development of small farms are: the establishment in settlements of supply and marketing cooperatives for the sale of goods by inhabitants, the expansion and creation of facilities for processing of agricultural products produced by personal subsidiary plots and farms, development provision of rural credit cooperatives (with the participation of Russian Agricultural Bank); forming of a system of land-mortgage lending; providing interest-free loan. For personal subsidiary plots preferential loan is granted in the amount of 300 thousand rubles; farms – up to 3 million, agricultural consumer cooperatives – up to 10 million rubles.

Analyzing the results of the national project "Development of agriculture", it should be noted the increase in meat production, the mass of profit, declining share of loss-making agricultural organizations. However, we could not overcome the tendency of reducing number of cows and milk production *(tab. 7)*.

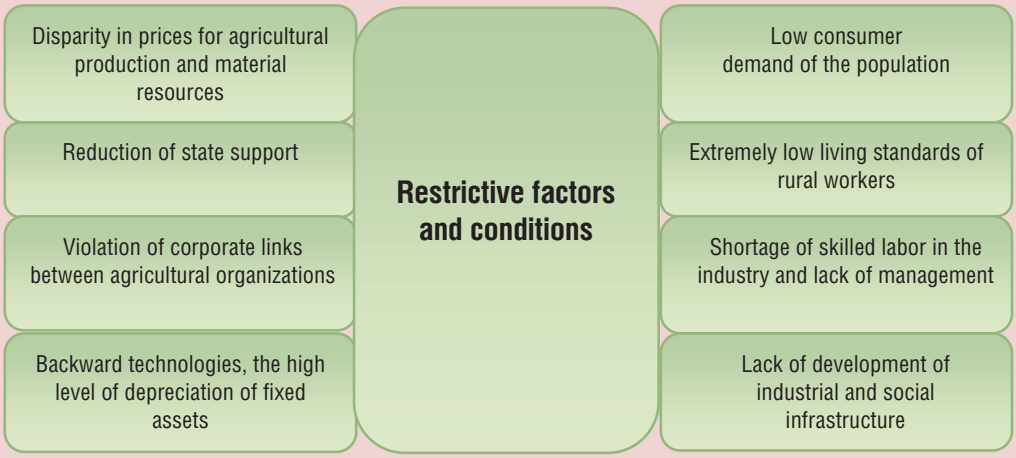
Taken in recent years, measures of state support of agricultural producers did provide the tendency of growth of production of individual products, but have not led to sustained economic growth. Major shifts in the quality of life in rural areas have not happened yet. Restrictive factors and conditions for sustainable agriculture development in the Northern Zone are shown in *figure* 5.

Table 7. Indicators of Agriculture in the Far North and similar territories for 2005 – 2010

Indicators	Year of 2005	2006	2007	2008	2009	2010	2010 to 2005,%
Livestock, thousand of head							
cattle	747.1	740.6	746.7	749.9	747.8	732.8	98.1
Including cows	330.7	324.6	326.0	323.0	322.4	314.2	95.0
pigs	221.3	247.9	265.5	267.7	275.5	287.8	130.0
deer	1297.9	1441.0	1458.8	1520.4	1553.0	1570.6	121.0
Food production, thousands of tons							
livestock and poultry for slaughter (in slaughter weight)	116.3	117.1	118.3	121.8	130.1	137.3	118.1
milk	816.3	801.0	800.8	789.1	789.1	770.3	94.4
Food production per capita, кg							
meat (in slaughter weight)	11	11	11	12	12	14	127.3
milk	76	75	76	75	75	76	100.0
Profit of agricultural organizations*, mln. rub	357	494	1302	1563	2429	…	-
Unit weight of loss-making agricultural organizations,%	42	35	30	…	…	…	-

* Data for 2008 – 2009 by regions, which territories are fully included in the zone of the North.
Source: 1. Economic and social indicators in the Far North and equivalent areas in the 1998 – 2010 years. – M., 2011. – URL: // http.www.gks.ru / bgd / regl / b10-22 / Main.htm
2. Agro-industrial complex of Russia in 2009. – Moscow: Ministry of Agriculture, 2010. – P. 339, 340.

Figure 5. Restrictive factors and conditions for the sustainable development of the agricultural sector of the North



Investigation of the effect of the agrarian reform on the stability of individual industries and social types of enterprises, their adaptation to changing environmental conditions in the case of the Republic of Komi allowed to state the following. Since the mid-1990-ies in the Republic the meat poultry stably operates on the basis of self-regulation.

The presence of skilled management team in food subdivision ensured the rational use of available economic capacity and adaptation to the changing market environment. Agricultural companies specializing in the production of eggs, pork, venison and fish, are able to develop dynamically with maintaining government support.

More than 90% of agricultural organizations in cattle industry in the period of market reforms have lost economic and social sustainability. They without outside help can not get enough profit to build productive capacity and carry out expanded reproduction. The use of only internal factors is not enough for the stability of the region's leading industry.

In the 1990-ies stable were organizations which were more attuned to the market, practically without any government support and in times of crisis increased production output. In the last decade in most northern regions there is an absolute and relative decline of production in farms. The vast majority of them belongs to the consumer type. According to the agricultural census in 2006 surplus meat was realized by only 1.6% of the population of farms in the Far North and equivalent territories, and milk – 2.6%.

By reducing the rural households, the deterioration of the demographic situation in the countryside, rural aging and a decline in its share of capable individuals, low production efficiency, based on manual unskilled physical labor, we should not make the emphasis on private sector citizens as a base for the formation of food stocks.

Farmer structure in the medium term in most regions of the North will not receive a significant development. Formation of the peasant farms requires a large investment to build the facilities and infrastructure, a lot of time, competence of work in the marketplace.

Measures to overcome the crisis and ensure the sustainable development of agriculture

Current economic, social and ecological state of the agrarian sector, primarily of peripheral (remote) rural regions of the North is characterized as unstable, which can get a very negative form associated with the elimination of agricultural production and the reduction of habitable rural area. To overcome the crisis and the transition of agriculture for sustainable development the package of measures was proposed *(tab. 8)*.

The main directions of the sustainable development of the agrarian sector of the northern territories are represented in the publication [4]. The priority areas are:

- to use new technologies, to implement balanced reproduction of the resource potential;
- to consider the North zone as a great reserve of production of ecologically pure products, and eventually a major exporter of organic products, generating additional rental income;
- formation of multi-functional economy in rural areas, associated with cooperation and integration, development of non-agricultural activities and recreational use of the countryside;
- increased government support of agricultural producers;
- creation of modern information and advisory systems of agricultural and rural development.

Innovation as a key factor for sustainable development of the agricultural sector

The objective need for enhancing innovation development of agrarian economy involves overcoming the technical and technological backwardness, stable operation of agricultural production, as well as higher incomes of rural workers. Sustainable Development Strategy for the agri-food complex taking into account the factors of innovation is crucial in the current situation.

The basis for the development of agricultural regions of the North, since the second half of the 60-ies – to early 90-ies of the last century has been the intensification of production. The agricultural sector introduced crop rotation, new crop varieties, new technologies of their cultivation, science-based farming systems, new animal breeds and crosses of birds, the industrial technologies of vegetable of greenhouse production, livestock products, new methods of processing raw materials and energy saving technologies in agricultural processing industries. This ensured the growth of agricultural production and improved its efficiency.

Table 8. The causes of the agrarian crisis and major measures of sustainable development of agriculture of the North

Causes of the crisis	Necessary measures to stabilize and develop agriculture
1. Underdeveloped legal and regulatory framework	At the federal level it is required to develop and enact laws: "On the agriculture of the Russian Federation" [5. 32], "On the state regulation of imported agricultural products", "On agricultural insurance", "On the state agricultural enterprise". At the level of northern regions the laws are to be adopted "On the reconstruction and development of agriculture", "On innovation policies and strategies in agriculture.»
2. Technical and technological backwardness, a high level of depreciation of fixed assets	Modernization of agricultural production using the latest technologies and breeding and genetic innovations.
3. Lack of financial resources for the implementation of expanded reproduction	Full financial support for agricultural development will require increasing the budget in two to three times higher than before the crisis period. The share of consolidated budget expenditures of the regions of the North on funding the agriculture should be increased to 5–7% rather less than 2% at present. 70–80% of the budget should be submitted through subsidizing agricultural prices. Enhance the contribution of the state to financing innovation in agriculture, industrial and social infrastructure in rural areas. Participation of industrial enterprises in the financing of agricultural and rural development. Agricultural enterprises and households access to financial markets – increasing the role of long-term loan: lax credit for the construction and modernization of livestock buildings should be provided for 20–25 years; and for the purchase of agricultural machinery and equipment – for 6–8 years. To expand the system of credit cooperatives and the use of leasing in the countryside. To write off debts of agricultural producers, to cancel taxes for five years for agricultural organizations, to introduce patents to farmers for economical activity instead of taxes.
4. Strengthening the non-equivalence of barter in agriculture to other sectors of the economy	To compensate losses to agricultural producers due to rising prices for consumed resources of industrial manufacturing.
5. Deficits and brain drain from the industry. Low levels of management	To increase the income of agricultural workers to the level of the national economy Significant improvement of the social environment: meeting the needs in comfortable housing, increased access to educational, medical, cultural, trade and consumer services, improvement of road conditions. Creation a system of continuous agricultural education – basic vocational, specialized secondary, higher vocational education, training and retraining. Development of the targeted staff program for the agricultural sector organizations, municipalities and the region.
6. The displacement of local agricultural product producers from the food market	The elimination of monopoly of procurement, processing and mediating structures, which would require transition into a cooperative basis of the cycle of production, processing and marketing of agricultural products. Priority of local agricultural producers in the procurement of products in regional funds. Agricultural producers access to the objects of retail food markets. State participation in the mortgage products (potatoes, vegetables) through the allocation of budget funds and lax credit.
7. Weak diversification of the agrarian sector	Formation of multifunctional agriculture in rural areas: the integration of agriculture, forestry and crafts, processing of agricultural raw materials and wild plants, recreational use of the countryside. Creation the conditions for the diversification of agricultural organizations requires correction of "Forest Code", "Land Code", law "On the Farming".
8. Lack of planning and forecasting	Creation a system of indicative planning and forecasting of the agri-food sector: development and adoption of concepts and programs for sustainable agriculture and rural development in the regions of the North.

During the transformation of economic relations and land reforms began mass bankruptcy of agricultural organizations, the loss of skilled personnel, destruction of productive capacity, the outflow of young scientists and the deterioration of the age structure of academic staff of agricultural science.

The analysis of the current state and evaluation of innovation activity in the agriculture of the Republic of Komi indicates that this process is characterized by low levels of innovative activity with considerable scientific potential. The share of agricultural enterprises, which are consumers of the most dynamic innovations, is only 10%. Innovations are actively introduced in the main agricultural enterprises, operating on an industrial basis around the cities Syktyvkar, Inta and Ukhta.

The analysis showes that for six farms (from 73 organizations) there is 35% of the number of employees, 64 of fixed assets, 75 of sales revenue, 84% of the profits. In this group of companies against other agricultural companies the average salary is higher by 2.7 times, the productivity – by 5, and the size of the allocated subsidies per unit of sales by 7.4 times lower, more stable financial condition.

In the majority of agricultural enterprises and farms primitive the dominate methods and techniques, obsolete used varieties and breeds of cattle are used forms of organization and management are imperfect. Particularly problem situation is in cattle-breeding. Now for modern technologies of milk was transferred 15% of the total number of cows.

Conditions and factors limiting the innovative activity of agricultural enterprises are: unprofitability and low profitability of production, lack of government support, weak logistics, inadequate training of staff personnel in the field of innovation management, the lack of public innovation policies and strategies of innovation infrastructure.

Factors, contributing to the innovative development of agriculture – a significant scientific, educational and human resources, favorable agro-climatic conditions for the efficient production of potatoes, vegetables of the local range, the availability of natural forage resources, including large areas of flood meadows, the ability to produce environmentally friendly natural foods, products of traditional industries are competitive not only at regional but also at national and international markets, sustainable national budget revenues allow to send its significant proportion in the development of innovations in agriculture.

The activation of innovation activity in plantgrowing is associated with the development of recovery systems of soil fertility, breeding methods, the creation and introduction of new varieties and hybrids that combine high yield potential, quality, the resistance to diseases and pests, adverse weather conditions, with technical and technological re-equipment of the industry.

Innovation processes in livestock sector will develop in the direction of improving the selection and breeding work to improve the breed and productive qualities of animals, the efficient use of feed resources, reconstruction and technical re-equipment of existing livestock buildings, construction of new farms and complexes, slaughterhouses, equipped with modern high-performance machinery.

The assessment of the situation in the agriculture of the Republic indicates that the activation of innovation without implementing a whole system of measures, above all, financial recovery and phase reconstruction of production becomes difficult. For the development of innovative processes we are to solve a number of tasks of the state innovation policy. The priorities of the development of innovative processes in agriculture are:

- the development of national innovation policies and strategies aimed at the formation of advanced technological structures;

- the unity of the state agricultural, scientific, technological and innovation policies in order to increase demand for agricultural production on scientific and technological achievements and raising capital in the development of innovative technologies;
- the improvement of legal regulation of innovation processes;
- ensuring the profitability, allowing to carry out the process of expanded reproduction in the industry;
- creating the conditions for activization of the agricultural science, its integration with higher education, improving training in innovative activities that enhance innovation activities of organizations and commercialization of research results;
- strengthening the cooperation between companies, research organizations and universities;
- technical and technological re-equipment of agricultural enterprises, the use of energy-saving technologies of production, storage and food processing;
- creating a system of training, retraining and skills development for innovative projects;
- providing scientific and technical sphere and the subjects of agricultural entrepreneurship with financial resources, reducing the tax burden to them;
- reproduction of soil fertility, prevention of all forms of degradation, the development of adaptive technologies of agroecosystems and agricultural land;
- the development of organic production in agriculture. In the North there is a unique opportunity to focus the production of environmentally friendly products on its vast land resources, to develop technologies of organic farming;
- improving the selection and breeding work to improve the breed and productive qualities of animals;
- creating a modern information system and infrastructural support innovation in agriculture;
- forming the economic mechanism of innovation development of agriculture;
- improving the social and labor relations;
- establishment of the federal and territorial system of long-term forecasting, strategic and indicative planning of agricultural development on the basis of innovation.

Financial resources and the reasonable system of finance take original, determining position in the structure of economic mechanism of innovation activity. In the deep crisis of the agrarian sector companies' own funds and credit resources into innovations are limited. At this stage, the state's role in the development of innovative processes should be strengthened.

In recent years, at the federal and regional levels, steps to modernize the state support of agricultural production were taken *(tab. 9)*. The state support for innovative development of agriculture is mainly carried out from the regional budget. For these purposes from the budget of the Republic of Komi for 2006 – 2010 79.4 – 88.9% of expenses were reimbursed, and from the federal budget – 11.1 – 20.6% *(fig. 6)*. It should be noted that in the economic crisis there was not a decline of state support both regional and federal levels.

Thus, this study allowed to make the following conclusions.

The objective prerequisites for sustainable development of the agricultural sector of the Russian North are due to increased production of environmentally friendly local food and food security, increased standards of living of the rural population, a stable and balanced nature management.

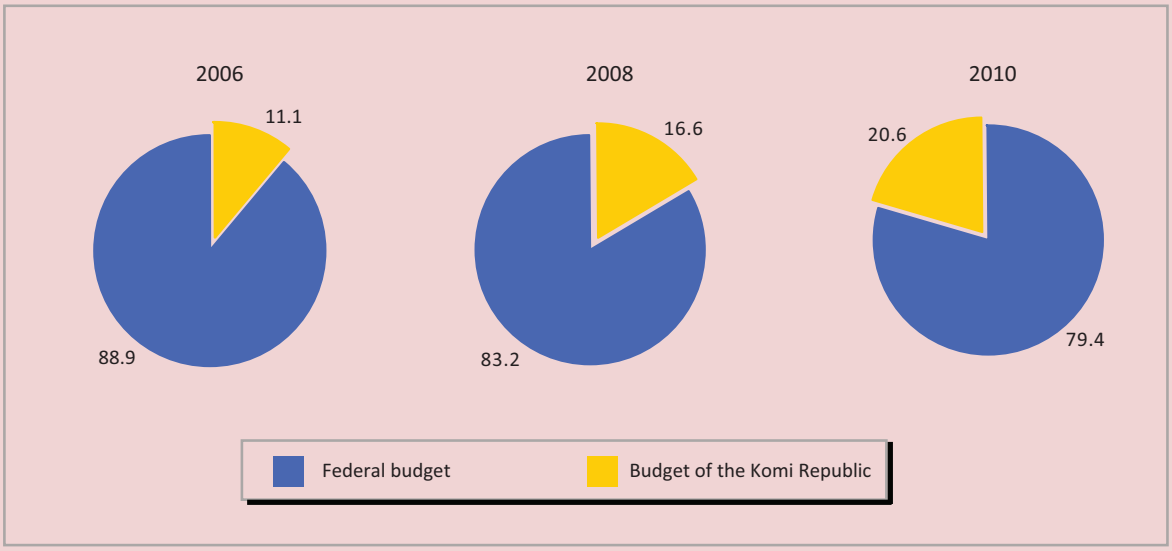
The assessment of sustainability of agriculture in the pre-reform period shows positive dynamics of agricultural production, improving living standards of farmers. In the 1970 – 1980-ies the industrial production of eggs, poultry, pork, vegetables of greenhouse, introduced industrial technologies in dairy farming was organized.

Table 9. Grants from the federal and regional budgets for modernization and innovative development of agriculture of the Republic of Komi for 2006 – 2010, thous. rub.

The direction of the support	Year of 2006	2007	2008	2009	2010
Human resource, information and scientific support*	6028.5	8479.1	7923.4	3636.0	2481.1
Technical and technological re-equipment*	54994.8	72304.4	102961.5	192011.0	138102.5
Reimbursement of interest on investment loans including the federal budget	11546.5 5482.5	19613.4 11969.8	15604.5 12069.7	33387.6 27331.0	57099.8 48148.0
Support for elite seed growing including the federal budget	118.9 -	200.0 -	654.5 281.6	695.7 231.9	624.0 200.0
Delivery of seeds including the federal budget	7693.5 6825.0	7026.6 6447.0	15844.7 12148.0	15997.2 10405.6	3026.9 -
improving soil fertility*	15907.3	21900.0	25465.8	24000.0	22600.0
Support for livestock breeding and fisheries including the federal budget	28347.0 2347.0	32192.4 4956.0	35320.8 10699.0	41985.0 15640.0	40231.4 12737.0
Reproduction of commercial fish*	3500.0	4169.2	5240.0	8307.0	8727.0
Reimbursement of a part of expenses for purchase of fertilizers and chemicals including the federal budget	3974.7 -	4317.2 145.0	8397.0 3249.7	14204.8 4975.7	8763.3 757.3
Construction of stock buildings*	-	-	8900.0	6600.0	18444.0
Creating additional capacities for milk processing*	-	-	2031.5	3000.0	-
Total including the budget of the Russian Federation	132111.2 14654.5	170202.3 23517.8	228343.7 38448.0	343824.3 58584.2	300100.0 61842.3

* Grants only from the budget the Republic of Komi.

Figure 6. The share of expenditures of federal and regional budgets on the innovative development of agriculture of the Republic of Komi, %



There were positive changes in the approximation of the conditions and living standards of rural and urban populations, as well as the financial state of the industry. In the pre-reform period all agricultural enterprises were profitable. The level of profitability of agricultural production corresponded to the optimal rate (40 – 50%), allowing to carry out the process of expanded reproduction.

Market reforms were accompanied by the decline in agricultural production, the degradation of the production potential and the peasant community as well. The main reasons for the instability of the agricultural

sector are: the disparity in prices for agricultural products and material resources, provided the village; the insolvency of consumers and untimely payments for the sold products, the reduction of state support; the violation of corporate bonds, going public agro service companies designed to serve the rural producers, made them virtually independent of the village workers; the liberalization of food imports; falling effective demand; backward technologies, the high level of depreciation of fixed assets; the extremely low living standards of rural workers, lack of skilled personnel in the industry, lack of management, inadequate infrastructure.

The investigation of the effect of agrarian reform on the stability of individual industries and social types of households (for example, the Republic of Komi) showed that since the mid-1990-ies meat poultry is stably functioning on the basis of self-regulation. Agricultural companies specializing in the production of eggs, pork, venison and fish, while maintaining government support are able to develop dynamically. Agricultural enterprises in the cattle-breeding industry without external assistance can not get enough profit to build productive capacity and implement the expanded reproduction. Households showed the stable activity in the 1990-ies. In the last decade in most northern regions there are absolute and relative reductions in production. The vast majority of households refer to the consumer.

Taken in recent years the measures of state support for agricultural producers, in connection with the implementation of the national project "Development of agriculture", although ensured the tendency of growth of the production of certain products, but have not led to sustained economic growth. Major shifts in the quality of life in rural areas have not happened yet.

The main directions of sustainable agriculture development are associated with the use of new technologies and balanced reproduction of the resource potential, the production of organic products, which allows to receive rental income, the formation of mixed and multifunctional agriculture in the countryside, the creation of scientific and information support, and increased state support for agricultural producers.

The actual trends of agricultural and rural development of the North contradict the principles of sustainable development. It is required to further study of ways of sustainable development and agricultural production in rural teritories and creating the necessary mechanisms for such a transition.

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UDC 332.146(470.57)

Formation and development of clusters in Russian regions: key issues and solutions (Republic of Bashkortostan)

The paper gives substantiation for the implementation of cluster policy in Russia as the key way of increasing the competitiveness of the country. The analysis of foreign and domestic experience of cluster formation was carried out. The concept of cluster supporting framework of the regions of Russia, considering clusters as a node element of the economy and promoting the binding of disparate elements of economic space, is proposed. The algorithm for implementation of cluster policy in the regions of Russia is proposed. The experience of its practical implementation in the Republic of Bashkortostan is given.

Competitiveness, cluster, competitive advantages, potential clustering of regional economy, tools for clustering.

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The problem of formation and development of clusters in the regions of Russia is still very relevant, because of the following symptoms of exacerbation of territorial development that have emerged from the 90s of the 20th century up to now:

✓ the low level of competitiveness of Russia does not comply with its economic potential (according to the "World Economic Forum" in 2000 – 2011 Russia's competitiveness ranks in the seventh top ten of countries in the world, there is a tendency of reducing the competitive position of the country);

✓ the low adaptability of regional social and economic systems of Russia to the impact of global financial and economic crises (according to official data, the RF GDP in the crisis of 2009 compared to 2008 decreased by 7.4% – one of the most significant falls in the world);

✓ not high enough level of interaction between enterprises, research and educational institutions in regions, once formed territorial-production complexes, has a negative effect on the binding economic space, which hinders the competitiveness of Russia as at the micro- and macro levels;

✓ leading regions have little influence on the development of adjacent areas, etc.

In connection with the foregoing, the aim of the paper is to study the theoretical and applied aspects of the formation and development of clusters in the regions as ways to increase the competitiveness of the Russian economy.

Disaggregation of the goal involves the following tasks:

1. Review of existing foreign and local clusters.

2. Explanation of reasonability of formation and development of clusters in the regions of Russia.

3. Identification of key problems of formation and development of clusters.

4. Development of principles and algorithms for the implementation of cluster policy in the regions of Russia.

5. Development of methodology for assessing future economic activity for the formation of clusters in the region and its testing on the materials of the Republic of Bashkortostan.

The practice of the most competitive countries in the world shows that an effective mechanism to enhance their competitiveness is the implementation of cluster policy, comprising a complex of legislative, administrative, economic and other activities aimed at creating and supporting the development of clusters.

Thus, countries-leaders of competitiveness rating such as Switzerland, the UK, Germany, Finland, Denmark, Sweden and the Netherlands carry out a targeted cluster policy. In these countries there is a network of competitive clusters, which employ about 40% of total employment in the economy, and produce more than 50% of GNP. The largest number of competitive clusters, according to the Institute for Strategy and Competition, Harvard Business School, operates in the UK (168) and the USA (152) [1].

In Finland, from eleven clusters the most important for the economy are: forestry, information, telecommunication, metallurgy and engineering clusters, providing the bulk of exports and forming a significant part of the gross domestic product. In Germany, according to experts, there are three world's top clusters of seven clusters of high technology, known as the "Silicon Valley of the twenty-first century" – these are Munich, Hamburg, Dresden.

Following the example of the leading countries the state support of cluster initiatives and cluster formation is carried out in China, India, Austria, Indonesia, Malaysia, Mexico, the Czech Republic, Hungary, Kazakhstan, Ukraine and others, that had a positive impact on the economy of these countries.

As from 2000, in a number of Russian regions cluster initiatives are formed. The pilot clusters projects are being developed on the examples of Nizhnekamsk petrochemical cluster, the cluster of the Lower Angara region, the automotive cluster in the Volga region, St. Petersburg maritime cluster, Ivanovo textile cluster, cluster of processing titanium, "Titanium Valley" [2] in the Sverdlovsk region, the prototype of the innovative cluster "Skolkovo", etc. But in Russia, *there is no systematic cluster policy*. The concept project for the development of cluster policy of the Russian Federation, developed in 2007 still remains a project.

In order to improve country's competitiveness *it is necessary to conduct economic changes*, which are capable in the medium term to significantly improve the quality of life. One of the areas, improving the competitiveness of the country may be the implementation of cluster policy.

This is due to the unique intrinsic characteristics of clusters, allowing to link together the disparate elements of the economic space in the region, namely:

- network organization of economic activity;
- presence of leading companies that can have a significant share in the domestic and foreign markets, supplemented by specialized service organizations;
- availability of competence (specialization in certain types of products competitive in the market on which the cluster has competitive advantages);
- concentration of cluster participants in the limited area, which provides unique advantages;
- interaction between cluster participants to produce competitive products in the domestic and foreign markets;
- presence of competition between cluster participants;

◆ rapid spread of innovations through the extensive network of information transfer.

According to international experts, Russia has only 8 clusters, which does not match the potential of the cluster [3]. This indicates that in the country an insufficient number of clusters are formed that meet the requirements of cluster theory. The problem is that the cluster form of organization is based on a fundamentally different system of linkages of businesses than those that are currently in the Russian practice. This is especially true about specificity of individual sectors and territories. In Russia, there is the dominant vertical integration, as evidenced by a significant number of vertically integrated companies, while the clusters use not only vertical but also horizontal integration.

Based on the synthesis of basic ideas of the theory of supporting economic framework (N.N. Baransky) [4], the theory of the supporting framework of the territorial structure of the economy by G.M. Lappo [5], the theory of poles growth of F. Peru, the theory of framework structures (J.M. Maergoiz) [6], the theory of territorial production complexes (N.N. Kolosovsky, M.K. Bandman) [7], the cluster theory of economic development by M. Porter [8] the concept of the author's supporting cluster framework of regions is proposed.

In the concept the supporting framework of the region is represented as a set of functional frameworks of three types: economic, social and environmental, which form a socio-ecological and economic space of the territory. In contrast to existing concepts of the supporting framework of territories as connecting elements that are "nodes" of development of the regions a network of competitive clusters is to be considered, which are characterized as a group of geographically and technologically interconnected competing companies and service organizations which occupy or are able to occupy a significant share of the domestic and foreign markets, united with the purpose of launching and selling products or specialized services that meet global standards, based on continuous innovation. Clustering, thus, may contribute to the competitiveness of enterprises and organizations entering in it.

The principles of component assembly of framework structure are extremely important. The concept of cluster supporting framework of territories is based on the following principles:

1. The principle of clustering of region's economy, engendering the nodal elements of framework structure and thus to get a synergistic effect of equal and partnership of government, business and science.

2. The principle of the common economic space, which consists in creating an environment that ensures the coordinated development of all components of the framework structure of the regional economy, including economic, environmental and social framework of the territory.

3. The principle of polycentrism, multitude of key elements of framework structure of the economy that can draw adjacent territories into its development.

4. The principle of consistency of strategic priorities for regional development and socio-economic development in general.

5. The principle of complexity of quantitative accounting and valuation of all components of the economic potential of regions. The practical importance of this principle is that it requires a full, comprehensive use of available resources in a given region, to ensure optimal involvement in economic activities of all its components.

6. The principle of dynamics of absolute assessments of framework structures in time requires the development of forecasts that take into account possible future changes in the socio-economic conditions affecting the state, key elements of framework structure of regional economies. The state of various components of framework structure, at the present time and in the future may not be the same.

To form the cluster supporting framework of Russia it is necessary to implement a cluster policy in the regions, which aims to encourage development of competitive clusters of different types and kinds.

At the first "preparatory" stage it is necessary to substantiate the cluster policy in the region, the analysis of foreign experience in the formation of cluster policy, selection of the type of cluster policy for the region, creation of an information base for the implementation of cluster policy.

At the second stage it is planned to allocate competitive clusters in the region – the objects of cluster policy in the region. To do this, it is necessary to justify the principles of separation of clusters, to develop the clusters' tools and identify different types and kinds of clusters in the region, to determine the composition of the clusters.

At the third stage it is reasonable on the basis of developed business plans of cluster projects on a competitive basis to carry out their selection, as well as to form organizational and legal regulations of a potential cluster.

At the fourth stage the decision on implementation of the pilot cluster projects is taken, a mechanism of cluster management is developed, the targeted program to support cluster development, with the compulsory examination in the antitrust committee, is developed.

At the fifth stage the target program to support cluster development in the region is realized, designed to create the necessary institutional, legal and economic conditions for the development of clusters, including: investment, information, personnel, organizational support to the development of clusters.

At the sixth final stage on the basis of the technique there is the monitoring of a cluster. At this stage may be taken a decision to terminate the state support of a cluster project, if the objectives are not met and a certain level of performance of the cluster is not achieved.

After completion of the stage six it can be a return to the third stage for selection of promising cluster projects not previously selected for implementation, depending on changes of the factors of internal and external environment.

In this direction, in the Republic of Bashkortostan the following work was done: the concept of cluster policy was developed, a set of measures for its implementation was approved, at the stage of the formation of the third cluster: timber, power engineering, industrial support of tourism. However, there are difficulties in the implementation of cluster policy in the Republic related to the objective evaluation of cluster potential, attractiveness of investments for the implementation of cluster initiatives, low activity of business entities for the advancement of cluster initiatives, lack of necessary infrastructure to support them, etc.

In order to expedite the implementation of cluster policy in the Republic we have carried out the assessment of types of economic activity (TEA) of the Republic of Bashkortostan promising for the formation of clusters.

The integral assessment of TEA in the Republic of Bashkortostan in 2005 – 2010 was carried out by groups of indicators shown in *table 1.*

For each of the seven groups of indicators, normalized according to the average index of the corresponding TEA indicator, the integral index is defined, followed by ranking and grouping of TEA on the prospects for the formation of clusters in the Republic of Bashkortostan.

The results of TEA grouping by their prospects for the formation of clusters are presented in *table 2.*

The most promising in terms of accelerated socio-economic development of the Republic of Bashkortostan by establishing competitive clusters are: manufacturing, construction, wholesale and retail trade, as well as mining, transport and communications and agriculture.

Table 1. Indicators of assessing the prospects of types of economic activities for the formation of clusters

Group of indicators	Description of indicators
1. Contribution of TEA to the economy	• The share of TEA in GRP, % • The share of TEA in capital assets, % • The share of TEA in investment, %
2. Employment	• The share of TEA by the average number of employees, % • Dynamics of changes in the average number of employees, units.
3. Potential cluster participants	• The share of TEA by the number of enterprises (organizations), % • Dynamics of changes in the number of enterprises (organizations), units.
4. Efficient use of resources	• Labour productivity (in GRP) million rubles/person 2. Capital productivity, rub. • Capital productivity ratio, rub.
5. Dynamics of resource use efficiency	• Capital productivity change, units. • Capital productivity ratio change, units.
6. Efficient use of resources in comparison with the Russian Federation	• Labour productivity in comparison with the Russian Federation, units. • Capital productivity in comparison with the Russian Federation, units. • Capital productivity ratio in comparison with the Russian Federation, units.
7. Localization of the scale of the Russian Federation	• The coefficient of localization by the average number of employees, units. • The coefficient of localization by the number of enterprises (organizations), units. • The coefficient of localization by GRP, units. • The coefficient of localization by fixed assets, units. • The coefficient of localization by investment, units.

Table 2. The grouping of types of economic activity of the RB by prospects for the formation of these clusters

Types of economic activity	Group №	Group characteristics
Manufacturing activity	1	High perspective formation of clusters
Wholesale and retail trade, repairing of motor vehicles, motorcycles, household goods and personal items		
Construction		
Mining operations		
Transport and communications	2	Medium perspective formation of clusters
Agriculture, hunting and forestry		
Real estate, renting and service activities		
Education		
Production and allocation of electricity, gas and water	3	Low perspective formation of clusters
Defense; compulsory social security		
Hotels and restaurants		
Healthcare and social services		
Other community, social and personal services		
Fishing, fish breeding		
Financial activities		

Thereafter, for the cluster separation the expert method is used. The evaluation in the country contributed to more than twenty potential clusters of Russian, regional and local levels, including the petrochemical, polyester, plywood and tile, timber, two machine building (power engineering and automobile), nanotehnological, pharmaceutical, beekeeping, mining, food, meat processing, tourism and recreation, etc.

As an example, we give the analysis of prospects for the formation of plywood and tile cluster in the Republic of Bashkortostan.

The presence of the growth potential and resource availability of a cluster in timber and woodworking industry. Forest Fund of the Republic of Bashkortostan has the area of 6.2 million hectares. Forest cover of the republic, according to the account on 1 January 2010, is 39.2%.

Despite the relatively small scale of forests in comparison with Russia the uniqueness of the forest potential of Bashkortostan is manifested in its composition. In the republic there are 35.0% of Russian lindens – the first place in Russia, 7.0 of alders – the second place, 4.0 – aspens – the fifth place, and 2.0% – birches, the fifteenth place.

The level of use of forest potential of the country currently stands at around 20%. About 8 million m^3 of timber is underutilized annually (83 place in the RF), that led to the accumulation of mature and overmature softwood timber of more than 284 million m^3 in the square: 1598.3 thousand hectares, hardwood – 284.3 thousand hectares, softwood – 257 thousand hectares.

One of the main causes of underutilization of the forest fund is: the lack of high-performance logging equipment and production facilities for processing low-grade softwood timber.

Another reason is a low rate of renewal of fixed assets in the forestry and wood industry of the country, lagging behind the average pace for the whole industry. This fact demonstrates the need for expansion of existing production facilities for advanced processing of softwood lumber.

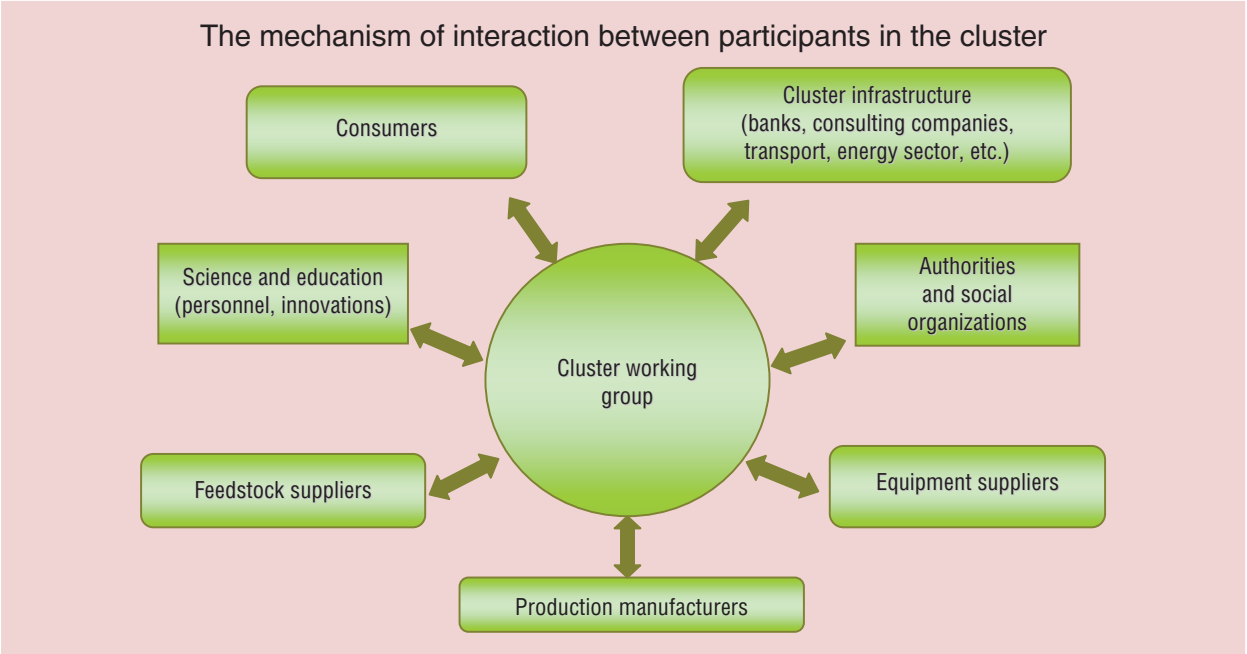
The presence of the leader enterprises in production and export of manufactured products. The largest enterprises are LLC "The Ufa Plywood Factory" and LLC "Ufa Plywood and Slab Factory" that can form the core of the cluster.

Laminated birch plywood and fiberboard made by enterprises, are in demand in foreign markets and above all in Europe. Strong global demand for these products has led to an increase in their exports over the period of 1990 – 2010 plywood by 2.2 times, fiberboard – 1.4 times, etc. The share of exports of plywood in recent years is 62.1% of the volume of production and the share of exports of fiberboard – 58.3%.

Businesses can become in the near future points of growth of the economy of the Republic. To do this within the plywood and slab cluster it is necessary to expand production capacity to produce products with higher value added: large-format plywood, MDF, fibreboard and particle board, charcoal and wood chemical products (acetic acid, ethyl acetate, furfural, etc.). Implementing the proposed measures may give impetus to the development of related industries and, above all, logging, thereby, promote the fullest use of prescribed cut.

The presence of potential participants in the cluster. In the timber industry of Bashkortostan the woodworking industry is represented, above all, by holding "Bashkir Timber Company" in which are focused logging enterprises LLC "Amzinsk timber factory", LLC "Beloretsk timber factory", LLC "Burzian timber factory", LLC "Tirlyansk timber factory", LLC "Zigazinsk timber factory", LLC "Kananikolsk timber factory", "Avzyansk timber factory", two plywood factories (LLC "Ufa wood-processing plant", LLC "Ufa plywood factory"), a leasing company LLC "Forest-Leasing". Ufa match factory, Tuimazinsk paper mill, Uchalinsk cardboard and ruberoid plant also function. In forestry, there are forestries of Ministry of Forestry of the Republic of Bashkortostan. Forest science is represented by the laboratory of forest sciences of the Institute of Biology of the USC RAS, the Botanical Garden of USC RAS, the Bashkir seed experimental station, the Bashkir forest project. Training is provided by the faculty of land management and forestry of the Bashkir State Agricultural University, the Ufa Forestry College. Currently, however, enterprises of wood and wood processing industry, forestry and forest science are *divided* among themselves. As a result of logging fund is used inefficiently with great loss of revenue.

Evaluation of risks and growth restrictions. Positive factors, minimizing the risks of wood processing and pulp and paper industry of the Republic, are: a significant number of their own raw materials for manufacturing of plywood, fiberboard, particleboard, MDF and wood-chemical products; stable and growing global timber market; a sharp increase in demand for forest products in China; an increase of domestic consumption of forest products; highly skilled, cheap labor, relatively cheap



raw materials (the domestic price for standing timber is almost 20 times lower than in Europe).

The foregoing suggests that in Bashkortostan there are prerequisites for creating a plywood and slab cluster.

The scheme of interaction of potential participants in plywood and slab cluster may be the following *(figure)*:

Cooperation within the cluster may be in the following areas: procurement of raw materials, logistics, management and information technologies, engineering and innovations, finance and investment, strategic planning, ecology, resource conservation, marketing, training and retraining of specialists.

Thus, the cluster policy, comprising a set of measures of state support of formation and development of clusters not only at the level of individual regions, but also the Russian Federation as a whole, is promising direction for improving the competitiveness of the country.

At the same time the efforts of individual regions in this direction are clearly not enough to solve the problems outlined in the paper and essentially are rare in nature. In this regard, there is a need of implementation of cluster policy in the Russian Federation on the experience of regions, which, of course, require the mobilization of substantial financial resources.

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UDC 316.44(470.12)

Social and cultural portrait of the region in the context of changes during 2008 – 2010*

The article considers the social and cultural transformation of the region, which appeared in the crisis period of 2008 – 2010. The study based on data of empirical analysis shows the changes in social well-being and social structure, value motivations of the region inhabitants. It identifies positive and negative aspects of social and cultural shifts in the regional development during the global financial crisis.

Impact of the crisis, social and cultural changes, social well-being, stratification of the population, basic values.

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The nature and direction of modernization of the country is largely determined by social and cultural potential of the population. Culture, as the social aspect of people's lives, is reflected in their value orientations, types and forms of organization of life, as well as created material and spiritual values, in particular technological improvements.

The problem of overcoming the crisis in the modern Russian society, conditioned by both financial and economic crisis of 2008 – 2010 and expressed in the innovation stagnation and signified by moral decline, provoked by the dominance of products of mass culture, is the subject of intense debates in the light of Russia's willingness and its regions to upgrade updates the social and cultural approach to the analysis of regional community [4].

The basis of social and cultural study of the region is the program of N.I. Lapin and L.A. Belyaeva "Social and cultural portrait of the Russian region" [5]. It includes standard tools and, in particular, the method of calculation of common indicators, measuring scale, providing a comprehensive, problem and analytical nature, presentation, and compatibility of the data. Studies on this method are conducted since 2005 in 25 regions of the country.

* This work was supported by a grant RFSF No. 11-32-03001a "Social and humanitarian potential of the modernization of Russia".

Social and cultural study of the Vologda Oblast has been carried out in 2008 – before the global financial crisis [11, 14]. Beginning with the second wave of the survey in 2010, the study came into the monitoring mode[1].

The modern crisis has clearly demonstrated that monostructural nature of the economy and its export-oriented growth are fraught with great risks. And because of the predominance of metallurgical production, strong integration into the global economy the Vologda Oblast was among the territories hardest hit during the recession. Gross regional product (GRP), reflecting the economic potential of the region, for the first time in recent years has declined. In 2008, still maintained a positive trend of GRP, as the impact of the crisis became apparent only at the end of the year. However, in 2009, the economic growth fell sharply (by 14%, *table 1*).

In November 2008, due to lower external demand and prices for steel products industrial production decreased by 44% (peak month of the recession), as a whole in 2008 – by 5%, in 2009 – 12%. The number of unemployed registered population in State Employment Service in 2009 amounted to 24.6 thousand people, which is 2 times higher than in 2008. The decline in production, employment led to falling living standards.

The government of the Russian Federation in connection with a reduction in government revenue (in 2009 – by 34%, in 2010 – 28%) attributed the Vologda Oblast among 17 most crisis regions. The oblast which was since the second half of the 1990-ies the donor, in 2011 became subsidized [9].

By the beginning of 2010 due to improved market conditions in the global market, with the adoption by the regional government of anti-crisis measures (optimization of budgetary expenditures, food security, employment promotion, preservation and support of major investment projects, and others [3]) it was out of the crisis, which resulted in the growth of major social and economic indicators.

One of the complex indicators that are sensitive to changes in social and economic development is human potential development index (HPDI). According to the method of calculation developed by the UNO under the "Development Program", [8] HPDI consists of three equally important components: income, determined by gross domestic product per capita (gross regional product) at purchasing power parity (PPP) in US dollars; education defined by literacy rates (with a weight of 2/3) and the proportion of students among children and youth aged 7 to 24 years (with a weight of 1/3); longevity determined by life expectancy at birth (life expectancy). This is one of the basic social and cultural indices that determine the possibilities for realizing the potential of the country and region.

In the Vologda Oblast, as in other parts of the country since 2000, there was the steady growth of HPDI *(tab. 2)*. In 2006, HPDI in the region reached the threshold, which according to international standards refers to the high level, i.e. mark 800. In Russia as a whole, this threshold was crossed again in 2006, however, the Vologda Oblast lags behind the level of HPDI of the Russian Federation (the pre-crisis level – 0.814 and 0.825 respectively).

The global financial crisis has significantly slowed the growth of HPDI in the country, in the Vologda Oblast has been a significant decline of the index (from 0.814 to 0.802).

[1] The survey was carried out in May - June, 2008 and 2010. The sample involved Vologda, Cherepovets and the Districts of Gryazovets, Nikolsk, Tarnoga, Veliky Ustyug, Babaevo, Vozhega, Kirillov, Sheksna. The volume of sample was 1,500 people. Representativeness of the sample is provided by the following conditions: ratio between urban and rural populations; proportions between the inhabitants of settlements of various types (rural communities, small and medium-sized cities), age and sex structure of the adult population of the region. Sampling error is 3%. The study also used data from monitoring "Values and interests of the Russians" in 2006, 2010. The total sample population – 1163 people. Conducted by the Center of social and cultural changes of the Institute of Philosophy RAS.

Table 1. Indices of main social and economic indicators of the Vologda Oblast (% to the previous period)

The main social and economic indicators	2007	2008	2009	2010	2010 to 2007
Gross Regional Product*	105.1	96.7	86.0	…	87.4
Industrial production	104.8	94.7	87.6	110.7	96.2
Export of goods (to January – November of the previous period)	120.5	161.9	45.0	131.0	115.0
Producer prices of industrial goods (manufacturing)	106.2	105.3	95.7	131.0	140.2
Net financial result of the organizations (to January – November of the previous period)	132.4	150.6	24.1	126.7	46.7
Investments in fixed capital*	103.8	85.9	71.1	96.9	61.4
The total number of unemployed, average for the year	76.1	143.0	137.0	80.1	119.4
Real disposable income (to January – November of the previous period)	109.8	98.2	88.7	107.4	102.7
Average monthly real wages	110.8	108.3	92.9	111.4	124.2
The actual size of fixed monthly pension*, end of year	114.9	108.2	126.4	111.9	175.8
Consumer prices for goods and services	112.7	114.3	107.2	109.2	150.8
The retail trade turnover*	118.0	108.5	89.4	110.9	126.9
The turnover of catering*	109.6	106.6	73.9	105.1	90.7
Paid public services*	103.5	102.3	95.7	97.9	99.2

* In comparable prices
Sources: Statistical Yearbook of the Vologda Oblast. 2009: stat. book / Vologdastat. Vologda, 2010; Social and economic situation of the Vologda Oblast in 2010: report. Vologdastat. Vologda, 2011.

Table 2. HPDI and its components: the population of the Russian Federation and the Vologda Oblast, 1990 – 2009

Territory	Year	GRP in dollars, PPP	Life expectancy, years	Share of students at the age of 7 – 24 years	HPDI	Rating in the world / in the RF
Russian Federation (in 1990 – the USSR)	1990	4905	70.6	No data	0.873	33
	1996	4230	65.9	69.1	0.780	71
	1998	6508	67.0	71.4	0.766	62
	2000	6747	65.3	75.0	0.763	60
	2005	11861	65.3	73.4	0.792	67
	2008	16092	67.9	75.0	0.825	65
	2009	14930	68.7	75.0	0.826	No data
The Vologda Oblast	1996	4302	65.4	70.2	0.782	22
	1998	7422	66.7	69.0	0.769	19
	2000	8460	65.9	71.9	0.775	7
	2005	15762	63.1	71.5	0.792	11
	2008	16096	66.9	71.2	0.814	16
	2009	12401	67.3	71.2	0.802	No data

Reference: HPDI of USSR in 1987 – 0.920 (26 in the world).
Sources: Human Development Indicators 1992. [Electronic resource]. Available at: http://hdr.undp.org/en/media/hdr_1992_en_indicators1.pdf; UNO, Development Program (DPUNO). Reports on the development of human potential in the Russian Federation. [Electronic resource]. Available at: http://www.undp.ru; HPDI RF and the Vologda Oblast in 2009 – calculated on the data of the Department of Economics of the Vologda government and the source: Russia and the countries of the world. 2010.: stat. book. Rosstat. M., 2010. P. 96.

Because of some increase in life expectancy index the rate of GRP markedly decreased. In general, it is a higher level of gross regional product, relative to other Russian regions that defined the region's high level of HPDI. However, the level of HPDI in the region did not become lower than the limits of the index in the developed countries reached in 2006 (0.800).

However, the crisis affected many aspects of life. Since statistics can not convey information about many parameters of social and cultural development, we will present results of the survey in 2010 in comparison with the data of the survey in 2008. According to these results, only one-third of the population of the region has not felt the influence of the crisis of 2008-2009. In the NWFD and Russia this proportion is much higher (56 and 47% respectively). Most of the region's population (68%) in one way or another has faced some difficulties due to lower income levels *(tab. 3)*. The crisis most of all affected the living standards of Cherepovets (72%).

The crisis has changed the social structure of the population, taking into account, in addition to material well-being, a number of other factors. When selecting social strata, we relied on the method of L.A. Belyaeva, and used the following criteria: income level, the presence of subordinates, and educational level [1]. These three indicators represent the socio-economic, socio-political and socio-cultural fields. Application on the basis of the above characteristics of the cluster analysis conducted by the K-averages, except iterations, leads to the selection of five clusters – social strata *(fig. 1)*.

"High status" have higher education, 5 – 10 subordinates, are "wealthy". "Experts" have higher education, are "well provided for", do not have subordinates. "Realists" have special secondary education, are "well provided for", do not have subordinates. "Poor executives" have special secondary education, 10 – 50 subordinates, are "well provided for". "Low status" have incomplete secondary education, are "poor", do not have subordinates.

According to the survey in 2008 most widely in the Vologda Oblast were represented the "realists" (42%). "Experts" were less (27%), "low-status" were one fifth of the population of the region (20%). "High status" (6%) and "executives" (5%) were the least.

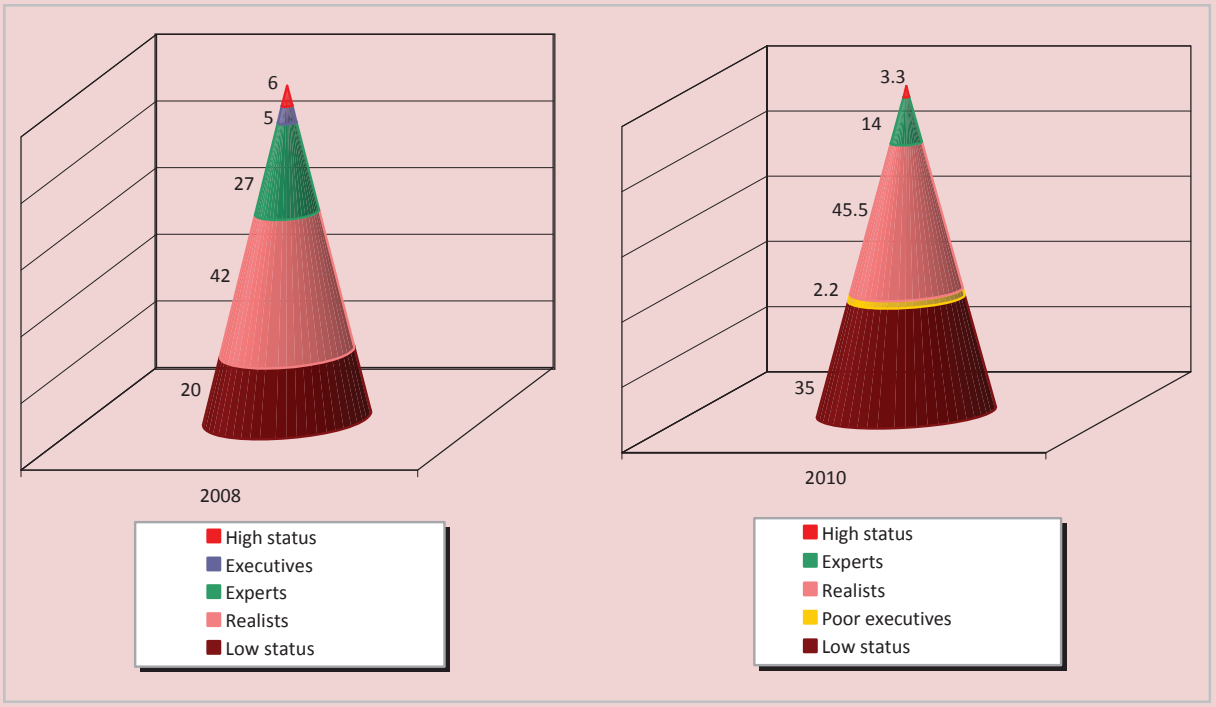
In 2010, the "realists" were still the most massive stratum. In addition, their number has increased slightly (from 42 to 46%), in particular through joining to this stratum of representatives of higher social strata. Small strata of people who have authority have reduced twice. Thus, the stratum "high status" decreased from 6 to 3%. Stratum "executives" decreased from 5 to 2% and due to the reduction of income of its members was transformed into the stratum of "poor executives" as well.

Table 3. Influence of the crisis of 2008 – 2009 on the life of the Vologda Oblast, the NWFD and Russia, %

Answer options	Vologda	Cherepovets	Districts of the region	The Vologda Oblast	Reference:	
					NWFD	RF
Found yourself without work and earnings	6.5	2.9	4.5	4.6	9.7	10.9
Lost earnings, profits	41.2	47.4	35.7	39.9	18.9	23.8
Faced with delays of wages, social benefits	10.0	16.0	14.7	13.9	14.4	12.5
Had to switch to another, less paid work	5.3	2.3	2.9	3.3	5.4	4.4
Had to take on extra work	10.0	12.0	8.5	9.7	8.2	6.4
Nothing changed	28.2	22.3	34.9	30.3	55.5	46.9
Managed to improve my skills and began to earn more	4.1	4.6	3.2	3.8	0.7	1.4
Other	1.2	0.0	0.8	0.7	2.2	1.5
Refused to answer	1.2	1.1	1.3	1.3	3.3	4.5

Source: hereinafter – the data of monitoring "Social and cultural portrait of the region" (ISEDT RAS, 2008 and 2010.) and "Values and interests of the people of Russia" (the Center of social and cultural changes of the Institute of Philosophy RAS, 2006 and 2010).

Figure 1. Stratification of the population of the Vologda Oblast in 2008 and 2010, %



As a result of the reduction in income significantly decreased the number of "experts" (from 27 to 14%). There was a sharp decline in social status of 15% of the population of the region, and the proportion of "low-status" rose to 35%. Thus, in the period of 2008 – 1010 there was a high downward social mobility.

In connection with the events of the financial and economic crisis the issues of social well-being of the population, as an integral index, which reflects the economic, political and social processes in society, became topical. The index of social well-being[2] (ISWB), as a part of the methodology "Social and cultural portrait of the region", allows to capture its three basic components: the degree of protection of the inhabitants of the region from major hazards; the degree of satisfaction with their lives as a whole; the degree of optimism in their assessment of their present and future [12]. In Russia in 2010, the raising of the index of social well-being of the population has stopped (in 2002 – 0.53, in 2006 – 0.61, in 2010 – 0.62). In the Vologda Oblast there was a slight decrease in the integral index of social well-being – from 0.62 in 2008 to 0.61 in 2010 at the critical values of ISWB, equal to 0.50. The overall level of social well-being of the region was slightly lower not only the district but nationwide figures *(fig. 2)*.

These components of integral index of social well-being, as indicators of exposure to hazards and life satisfaction of the population, by 2010 have not changed their values (0.60 and 0.61 respectively, *fig. 3*). However, there was the decrease in the level of optimism in society. The highest stress experienced people in leadership positions (the reducing of ISWB – from 0.72 to 0.58). The coefficient of optimism declined most at residents with low incomes (from 0.55 to 0.52).

[2] The generalized index of social well-being (ISWB) [5]. With interviews are measured three components of social well-being of the population: the degree of protection from 10 social risks, the degree of satisfaction with their lives in general, the degree of social optimism – the comparison of living standards to last year, expectations for the coming year, confidence in their future.

Figure 2. The index of social well-being of the population of the Vologda Oblast, the NWFD and the RF in 2008 (2006) and 2010

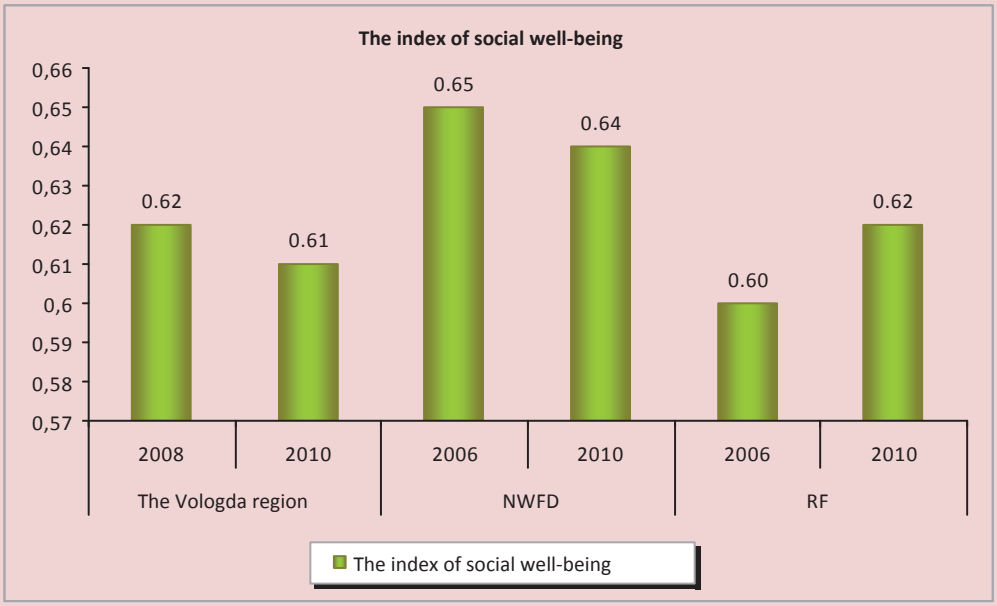
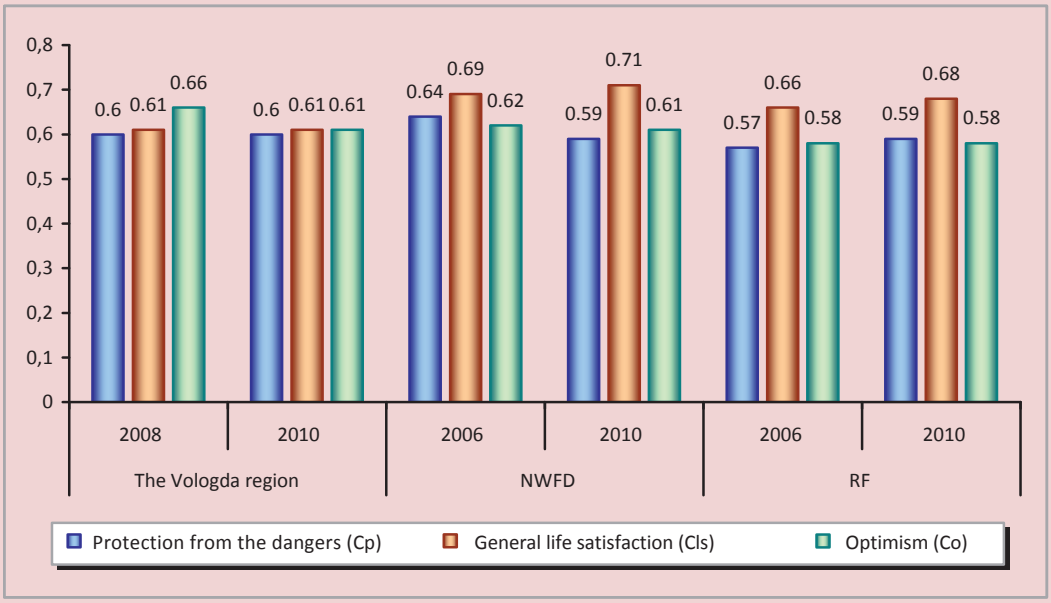


Figure 3. The coefficients of the index of social well-being in the Vologda Oblast, the North-West Federal District, the Russian Federation in 2008 (2006), and 2010



Individuals who are in the age range of 25 – 45 years, it decreased from 0.65 to 0.62, while those without a spouse – from 0.64 to 0.61. Note that in the region the coefficient of general life satisfaction is lower than in the North-West and Russia (0.61 against 0.71 and 0.68, respectively). At the same time the level of protection from the dangers in the region is higher (0.6 against 0.59). Figures correspond to the level of optimism of the North-West and are higher than in Russia as a whole (0.61 against 0.58).

The components of the index of social well-being indicators in the cities of Vologda, Cherepovets and districts of the oblast are different. In 2010 compared to 2008 across the region there was a decrease of the partial indices of social well-being of the population *(fig. 4)*.

Most of all the index of social well-being decreased in Cherepovets (0.04), least of all in Vologda (0.01). Nevertheless the dwellers of Cherepovets stored the highest level of the index of social well-being in the oblast. The value of the index of social well-being of inhabitants of Vologda and districts are, as always, similar.

During the crisis, the level of optimism and security of people most fell in Vologda. At the same time, satisfaction with life in the regional center increased slightly. In Cherepovets, there was the decrease of all components of the index of social well-being of the population, but more notably as in Vologda, reduced the coefficient of optimism and less notably - the vulnerability of people. Overall, however, Cherepovets has the highest index of social well-being, significantly higher than region-wide *(tab. 4)*. In the districts life satisfaction remained at the same, fairly low level, with seriously reduced coefficient of optimism, and vulnerability to hazards has increased. Thus, each territory of the region has its own characteristics, which are projected on the minds of its inhabitants. Although crisis did not reduce the overall level of satisfaction with life, they had an internal social and psychological pressure on people, manifested in reduced representation of optimistic views on the future.

Table 4. The components of the index of social well-being in the Vologda Oblast in 2008 – 2010, the regional section

Components of the index of social well-being	Vologda		Cherepovets		Districts		Oblast	
	2008	2010	2008	2010	2008	2010	2008	2010
Coefficient of protection (Cp)	0.6	0.57	0.63	0.62	0.57	0.60	0.60	0.60
Coefficient of optimism (Co)	0.63	0.59	0.69	0.65	0.66	0.59	0.66	0.61
Coefficient of life satisfaction (Cls)	0.6	0.61	0.68	0.66	0.59	0.59	0.61	0.61

Figure 4. The index of social well-being in the Vologda Oblast in 2008 – 2010, the regional section

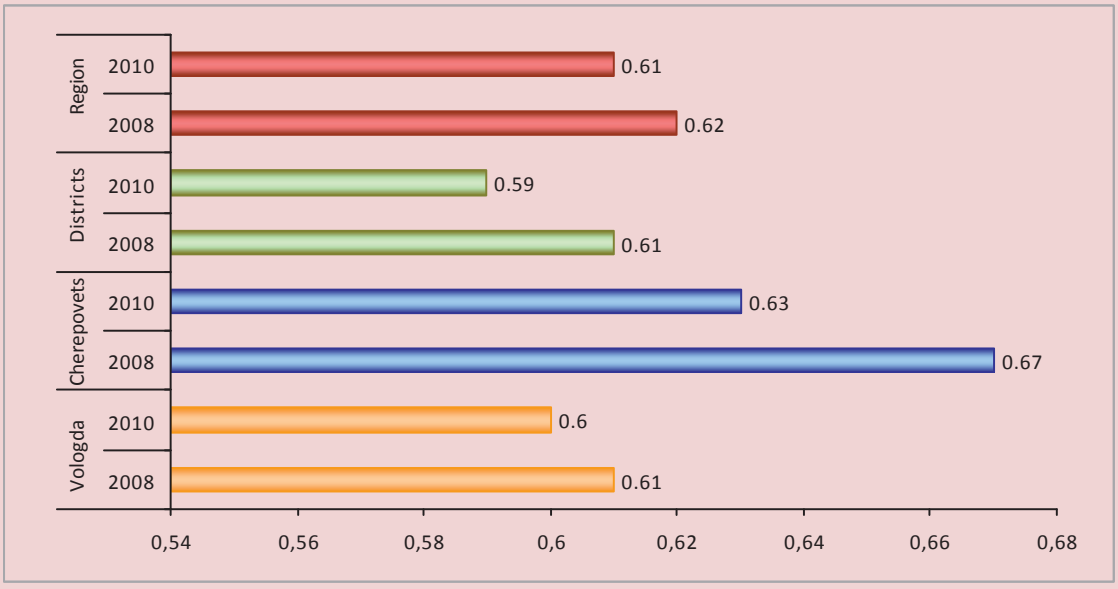


Table 5. Value preferences of the population in the Vologda Oblast in 2008 and 2010 (weighted average points on a 5-point scale)

The structure of values of the Vologda Oblast in 2010	Values	The Vologda Oblast		The RF		Rating of 2010	
		2008	2010	2006	2010	of the Vologda Oblast	of the RF
Integrating core (4.4 and more)	Human life	4.53	4.64	4.37	4.80	1	1/2
	Family	4.47	4.53	4.69	4.80	2	1/2
	Order	4.36	4.49	4.69	4.72	3	4
	Sociability	4.42	4.48	4.51	4.73	4	3
Integrating reserve (3.91 – 4.39)	Welfare	4.28	4.38	3.68	4.59	5	5
	Independence	4.28	4.29	4.14	4.47	6	6
	Tradition	4.01	4.19	4.34	4.40	7	8
	Work	4.24	4.11	4.08	4.29	8	9
	Freedom	4.20	4.08	4.25	4.44	9	7
Opposing differential (3.0 – 3.9)	Morality	3.87	3.80	3.66	4.10	10	11
	Initiative	3.96	3.74	4.0	4.13	11	10
	Sacrifice	3.64	3.66	3.99	4.07	12	12
Contentious peripheral (2.99 and less)	Imperiousness	2.86	2.49	2.24	2.76	13	13
	Wilfulness	2.72	2.42	2.06	2.49	14	14
Density of the value space		1.81	2.22	2.63	2.31	-	-
Ranked according to the Vologda Oblast in 2010							

Note that the data of public opinion monitoring "The economic situation and social well-being of the inhabitants of the Vologda Oblast" held by ISEDT RAS, supports the conclusion on the decline in social well-being of the population in 2010 relative to 2008 (in 2009 these figures were even lower) [13, 15].

The basic component of social and cultural potential is the value preferences of the population [7]. The study showed that the value space[3] of the region in 2010 has increased (from 1.81 units in 2008 to 2.22 units in 2010; *tab. 5*). This happened on the one hand, due to increasing proportion of the population supporting the most important values, and the other - by reducing the proportion of those who support the values of the least significant order (the values of integrating core and conflict periphery respectively).

Thus, greater awareness of the population was manifested than before the crisis. It is possible that at a critical moment there was another revision of values: the situation has not changed cardinally, but there was an increase of values supported by the majority and the reducing of significance of negated values. Thus, the role of human life, family, order, sociability that makes up the backbone of the value of the people's world (the layer of integrating core) increased. Importance of certain values of the second order (the layer of integrating reserve) increased. As can be noted, in the crisis the value orientation of inhabitants of the region show that they, having the desire to maintain order and prosperity, are not ready to act, since the importance of values to change the situation (freedom, initiative, self-willed), and work decreased. We emphasize that the significance of all values of the Russians, including those negated by the majority (the layer of contentious peripheral), have generally increased.

During the crisis, people's motivation to work has not changed significantly. As before, the majority of the inhabitants of the Vologda Oblast in prefers to have a job that brings a small but stable income, and confidence in the future (45%). In the period of 2008-2010 innovative activity of the population, reflected in the organization of a new service, company, product, technology, increased (in Vologda regions and districts; *tab. 6*).

[3] Value space means structured environment which includes the majority of people's value categories.

Table 6. Innovation activity of the population in the Vologda Oblast in the period of 2008 – 2010, in %

Answer options	Year								Reference:	
	2008	2010	2008	2010	2008	2010	2008	2010	2010	2010
	Vologda		Cherepovets		Districts		Oblast		NWFD	RF
Participated as an organizer	5.4	6.7	6.1	5.6	2.9	4.7	4.3	5.5	3.1	3.1
Participated on a par with others	9.1	8.9	14.2	5.1	8.9	5.9	10.3	6.4	10	4.6

Note. Question of the year 2008: "Have you participated in the making of any innovations within the last 5 years?"; question of the year 2010: "Have you participated in the making of any innovations within the last 12 months?"

Table 7. The social and demographic profile of innovators in the Vologda Oblast in 2010, %

Criteria	Participated as an organizer	Participated on a par with others
Sex		
Male	44.6	52.9
Female	55.4	47.1
Age		
under 24 years	10.8	14.3
25 – 34	24.6	24.3
35 – 44	26.2	31.4
45 – 54	26.2	20.0
older 55 years	12.3	10.0
Social status		
"High status"	16.9	7.5
"Experts"	26.2	26.9
"Realists"	41.5	41.8
"Poor executives"	3.1	4.5
"Low status"	12.3	19.4
Type of settlement		
Village, rural settlement	21.5	24.3
Urban settlement (industrial community)	6.2	7.1
Small town (up to 100 inhabitants)	13.8	8.6
Large City (100 – 500 thousand of inhabitants)	58.5	60.0

The organizers of innovative activity in 2010 were more often women (55%), men, by contrast, often participated in it along with others (53%). At the same time most of the women initiated the creation of new firms (54%) and men – a new product (53%), new technology (60%). The age of innovators correspond to 35 – 54 years. And among the organizers and participants there are more people with secondary special education (among organizers – 31%, participants – 36%), less with higher (among organizers – 29%, participants – 30%). As for the material level, they refer to well provided for (among organizers – 40%, participants – 33%).

Given the social status of innovators, we note that there are more "realists" (42%) and "experts" (27%). As a rule, these people live in major cities *(tab. 7)*.

The most important aspect of social and cultural development of the region is social and territorial identification of population[4], i.e. self-appraisal of the population belonging to certain social and demographic strata. According to experts, economic, social and cultural and other co-temporary problems are the basis for the formation of identification of the population [2].

[4] Value space means structured environment which includes the majority of people's value categories.

The degree of membership can be expressed through the coefficient of proximity intensity - Cpi [6]. The measurement results showed that for residents of the Vologda Oblast the proximity coefficient is the most important in relation to the inhabitants of the settlement, in which they live. Regional proximity is weaker. All-Russian and universal human connection is the weakest. In the Vologda Oblast in 2010 Cpi recorded a decrease in settlement proximity (from 7.7 to 7.23 units) and increase of regional one (from 1.45 to 1.76 units; *tab. 8*).

Perhaps the inhabitants of the region were rallied by inner anxiety because of worsening of regional problems and the emergence of threats to the future of the territory. General experience increased feelings of regional unity. Along with this, the reduction of settlement proximity is conditioned by global trends of individualization of society rather than crises. Based on the nationwide monitoring "Values and interests of the people of Russia", conducted by the Center of social and cultural changes of the Institute of Philosophy RAS (1990 – 2010), we note that there has been a decrease not only in settlement population identity but also professional, age, property, as well as other kinds of strata proximity which weaken, losing their previous intensity. Weaker people feel a sense of ownership to certain communities, focusing largely on a narrow circle of people – family. The family in the post-soviet period has undergone several transformations, while the main interests of the population are concentrated primarily on the family (in the region – 47%; in the Russian Federation – 61%) and only then – on professional activity (13%; in Russia – 14%), ensuring a decent income (8%; in the Russian Federation – 6%) and education (both 4%). In this regard, we emphasize that the weakening of the sense of identity among the population leads to a decrease in motivation for creative work.

In general, the crisis has both negative effects (reducing levels of IDHP and social well-being of the population, optimistic mood, changing the social structure of the population in the direction of trouble, reducing the importance of initiative), and some positive aspects (the extension of the value space of the population, some increase in innovative activity , a large regional cohesion).

We emphasize that only individuals who have professional education, who are well provided for, they saw in the crisis the time to display their abilities, which did not take long to put in some increase in innovative activity. However, most people did not become susceptible to change and under the threat of losing a job, wealth, status, stability, kept inertia, maintaining the values of order, prosperity, traditions and denying the value of freedom and initiative. On the one hand, it may be only a temporary reaction of the people in response to the impact of financial and economic crisis, on the other – a certain rigidity of society can be a factor

Table 8. The coefficient of strata proximity intensity of the population in 2008, 2010 ("own", "another's"), a territorial section

Territory	Residents of the territory in which I live		Residents of my region		Residents of Russia		Residents of the Earth	
	2006 – 2008*	2010	2006 – 2008	2010	2006 – 2008	2010	2006 – 2008	2010
The Vologda Oblast	7.7	7.23	1.45	1.76	0.59	0.47	0.51	0.34
The Kursk Oblast	8.5	7.18	1.85	1.59	0.84	0.66	0.55	0.36
The Tyumen Oblast	8.54	7.27	0.67	0.76	0.35	0.35	0.25	0.27
The NWFD	-	-	-	1.5	0.6	0.8	0.4	0.4
The RF	-	-	-	2.1	0.8	0.9	0.7	0.4

* Note. The Vologda Oblast – 2008, the Kursk Oblast – 2007, the Tyumen Oblast, the North-West Federal District and Russia – 2006.

restraining modernization processes in the country. Meanwhile, the crisis has highlighted the potential of the population, which has not been used previously. Increasing the level and quality of life of the region population, which includes providing an enabling social environment for the development of abilities of each person, conditions and comfort of life as a fundamental objective of the Strategy of social and economic development of the Vologda Oblast in 2020 [10] will multiply the social and cultural potential of the population, thereby accelerate the transition of the economy to an innovative type of development.

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UDC 614(470.21)

Policy priorities in the health protection sector of a Northern region

The article is devoted to the modernization of the health of a northern region (the example of the Murmansk Oblast) and the promising directions of implementing its own policies in the health protection sector at a regional level. The article gives the analysis of the medical and demographic situation in the Murmansk Oblast, as well as the main priorities of the modern regional policy in the health protection sector. It identifies the priority directions of the policy in this sector, requiring implementation at federal, regional and local levels.

Medical and demographic development, health protection, public policy.

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The level of population health is one of the most important aspects of the future development for both country as a whole and each region. Numerous external factors influence the level of population health: economic, social, environmental, institutional, constitutional and genetic characteristics, the effectiveness of the health care system. But still now the true role and nature of the interaction between these factors is not completely clear [2]. Differences in the level of health observed between countries and regions, between different groups within the country/region, may suggest that most of the factors that influence health, including lifestyle, environment, public health effectiveness is directly dependent on the overall social, economic and political development, i.e. from how economic welfare is distributed and used [3]. Low levels of health entail reducing opportunities for economic growth and competitiveness of the region's economy, the growing number of social anomalies and social tension.

Medical and demographic situation in the North is due to climatic conditions and specific features as well that make up the overall socio-economic and ecological spheres[1]. All of the northern regions geographically, economically and politically are distant from metropolitan areas, therefore all significant decisions relating to these territories are made in the centers located in more southern regions.

[1] The level of health is directly influenced by environmental conditions. In most northern regions the areas around the concentration of factories, as a rule, are zones of ecological emergency with excess of acceptable standards of air, water and soil pollution. In general, in the northern regions over the past 10 years there is an increase in emissions of pollutants into the air from mobile sources in the whole in northern region by 56.4% (in Russia – 9.6%). The overall ecological status of water bodies is satisfactory, but, for example, in the Murmansk Oblast, the total volume of contaminated waste water the share of passing through a wastewater treatment plant is 81.5%, and purified to normative values – only 5.4%. A major problem is disposal of waste oil, solids, and mercury-containing wastes. Some municipal landfills were organized without consideration of environmental, sanitary and fire regulations.

In addition, most regions of the Russian North are dependent on natural resource exports and government subsidies [4]. However, a significant role of the North for the country, the specific features of these territories, caused by extreme climatic conditions, remoteness from the central regions of the country, single-industry focus, require special government attention, constant consideration of the specifics of the northern territories in the development and implementation of policies in the community health protection.

Despite some positive trends in recent years, medical and demographic situation in the northern regions is characterized by a number of serious problems. Most of the northern regions are characterized by an intensive population decline, which main source is migration decline, and despite the fact that in recent years in most northern regions it has decreased and stabilized, there is still a high outflow of population. With regard to population movement, here, unlike in Russia in general, in most regions there is natality. However, this is mainly due to the increase in crude birth rates, but not reduced mortality. The high level of infant mortality is of particular concern, and in some regions – its growth. The main indicator of life quality – expected life interval of the population – the average for the northern regions lags behind the national average by 2.5 years (only in the Khantia-Mansia and Nenetsia Autonomous Okrugs expected life interval is above the national average) [5]. Of a particular concern is the extremely high sickness rate of alcoholism cases and alcoholic psychosis, which in turn produces the growth and high rates of mortality from external causes, injuries, poisoning, digestive system diseases. There is a trend of increased mortality from tuberculosis and neoplasms in most northern regions. In general, the health of the population of the northern regions remains low.

The main health problems of the population of the Murmansk Oblast are currently the high level of general morbidity, high mortality rate for all classes of determining factors. The primary indicator of morbidity is above the national average *(tab. 1)*. In recent years there has been a steady increase in cardiovascular diseases. In 2009, the total morbidity by coronary heart disease in the region increased by 3.8% and stroke – 18.1% (in 2009 amounted to 5637.8 morbidity cases and 144.8 per 100 thousand inhabitants, respectively [1]). There is an increase of malignant neoplasm cases – for the last five years the figure rose among the male population by 10.4% among women – by 9%. Of a particular concern is the high mortality rate of people of working age, particularly males (death rate of men of working age is approximately 4 times higher than the same of women), which indicates a low level of health of the workforce.

There is the deterioration of social diseases. One of the most serious problems in this area is the prevalence of alcoholism in the region. Despite the fact that in 2009 the prevalence of alcoholism in the Murmansk Oblast was lower than the average for Russia, the incidence rates and prevalence of alcohol psychosis are still higher than the average Russian index (in 2009,

Table 1. Common sickness rate of the population of the Murmansk Oblast (number of cases per 1,000 inhabitants) [1]

Sickness	Territory	Sickness cases		
		2007	2008	2009
Primary	Murmansk Oblast	818.1	816.5	855.0
	RF	771.0	721.7	802.5
Total	Murmansk Oblast	1623.5	1631.4	1696.1
	RF	1544.2	1560.9	1607.2

the prevalence of alcoholic psychosis was 108.1 per 100 thousand inhabitants of the Murmansk Oblast, at 74.0 for the Russian Federation [6]). A similar situation exists on the incidence of drug abuse – indicators are almost twice above average in Russia [7].

Such a medical and demographic situation is largely the result of socio-economic transformations of the 1990s and in the future, the level of health can only deteriorate. And here, one of the most significant problems is the poverty of the population (despite the notable achievements of recent years in overcoming it, the official poverty rate in the region exceeds the national average – 14.7% of the population versus 13.2% in Russia in 2009 [6]). Poverty is a consequence of the low level of health, and its main factor, regardless of the root cause (the amount of income, socio-economic status, living conditions, and education level) [8]. Poverty determines a shorter life expectancy, high infant mortality, low reproductive health care, high risk of communicable and noncommunicable diseases, alcoholism, drug abuse, suicide, etc. [3]

Unemployment, low incomes, lack of personal safety, crime, fear of the future, conflicts at work and family problems, job instability, social disintegration – in the aggregate, this leads to a sharp increase in the manifestations of psychosocial stress conditions. Social ill health produces cardiac diseases, manifests in the growth of social abnormalities and antisocial behavior: drug addiction and alcoholism.

In addition, the problems existing in the health care system do not allow to fully meet the needs of the residents in the effective prevention and treatment of diseases, improving health. Currently, in most of the northern regions there are low levels of accessibility and quality of health care facilities, weak personnel and underdeveloped infrastructure capacity. In addition, the regions of the Russian North are characterized by considerable differentiation of municipalities in terms of health system development.

In the administrative centers of the RF territories and municipalities where economic activity is carried out by corporations with social responsibility, infrastructure indicators, such as the level of personnel and infrastructure provision of medical facilities and the effectiveness of the health care system, correspond to the levels reached in the inhabited regions of Russia. Here, for example, the availability of medical staff in 2009 was: Naryan-Mar – 46.3 persons per 10 thousand inhabitants, Norilsk – 48.5 persons, Murmansk – 80.3, Salekhard – 119.4, Anadyr – 148.1 [9].

For the closed administrative-territorial units (CATU), with yet an acceptable level of personnel and infrastructure provision of medical facilities, problems of its development are increasing. This is mainly a consequence of the municipal reform led to a significant narrowing of the tax base of a closed administrative-territorial unit, and "divarication" of their status: on the one hand, these are territories, performing tasks of national security and supervised by the federal government, on the other – usual urban districts with a standard set of local issues. The level of medical service in CATU is low: in 2008, the number of inhabitants satisfied with the quality of medical service in Severomorsk was 49.4%, in Polarniy – 50.6, in Skalistiy – 51, in Zaozersk – 54, in Ostrovnoy – 55, in Snezhnogorsk – 67% people[2].

The problem of the low level of health system development is the most acute for settlements with small populations (especially – places of residence of representatives of indigenous peoples), and they are most in the regions of the North. Here the level of accessibility of health facilities is extremely low. Availa-

[2] The data of sociological studies in 2008 for municipalities of the Murmansk Oblast, including CATU Zaozersk, Ostrovnoy, Skalistiy, Snezhnogorsk, Polarniy, Severomorsk, on public satisfaction with the level of accommodation, presented in the report on the results of the research work "Implementation of a sociological research on the study of citizens' opinion about the level of living comfort in the municipalities of the Murmansk Oblast", published on the official site of the Murmansk Oblast (www.gov-murman.ru).

bility of medical personnel in most municipalities is 1.5 – 2 times lower than the average for the territory of the Russian Federation, to which they relate. A large part of the medical staff work in regional/municipal centers. For example, in the Nenetsia Autonomous Okrug 126 of 163 doctors work in Naryan-Mar (46.3 per 10 thousand inhabitants in 2009). Accordingly, in the remaining municipalities work only 37 doctors (availability of medical personnel is about 20 per 10 thousand inhabitants, with the average in the Nenetsia Autonomous Okrug – 38.8) [6, 9]. The level of health services quality in most municipalities is estimated by the population as low. In some remote/rural settlements there are no permanent medical facilities and pharmacies. Availability of medical personnel is at a low level, there are no incentives to attract them from other regions. In many settlements there are no facilities for work and accommodation for medical professionals. The material-technical base of medical institutions is extremely weak. Transport accessibility and specialized emergency medical care is low. In general, the large territory of northern Russia is characterized by low availability and quality of health facilities. This situation is mainly the result of the lack of necessary resources for the development of health facilities and the maintaining of them at a minimum, vitally necessary level as well [10].

In recent years in the Murmansk Oblast the potential of the health care system certainly has improved. Due to the implementation of the national project "Health" in 2006 – 2009, medical institutions were equipped with modern equipment, vehicles were carried out works on construction, reconstruction, etc. However, despite this, at present, almost half (49%) health facilities are out capital and ongoing repairs. Most first-aid stations and clinics are located in unsuitable for health care buildings built in 1930 – 1950's with 100% wear, some of them are in buildings with stove heating, where there is no centralized water supply and sewerage [1].

The serious problem is understaffing of health facilities in the Murmansk Oblast. Medical staff deficit in 2009 was 38% (953 physicians), which is due to the absence of a medical school in the Murmansk Oblast, and working incentives to attract professionals from other regions to work as well. To the most degree understaffing concerns such areas as cardiology, oncology, drug and alcohol abuse, pretrial psychiatry. In a number of municipalities in the region (Kandalaksha, Kola, Lovozero, Pechenga, Olenegorsk) rates of cardiologists are not manned at all, in Murmansk 3 doctors work at 9.75 rates. The coefficient of part-time oncologists is 2.3, neurologists – 1.7. With the exception of Murmansk, in all health institutions of municipalities in the region specialists of drug treatment services are not enough.

The Murmansk Oblast, as well as for the northern regions in general, is characterized by high inter-municipal differentiation of personnel and infrastructure provision of health institutes. Thus, in the Kola district of the Murmansk Oblast provision in physicians is only 20.5 people per 10 thousand inhabitants, in Tersk – 22.2, in Lovozero and Pechenga districts is about 23, and in Kovdor – 24 people per 10 thousand inhabitants [11-13]. Inter-municipal differentiation of this indicator is almost 4 times. A similar situation exists for the provision with public nurses, hospital beds: thus, if the nurse provision in Murmansk in 2009 was 157.4 per 10 thousand inhabitants, in the Kola district – only 55.5; hospital beds – 142.2 per 10 thousand inhabitants in Murmansk against 54.0 in the Tersk district [9, 11-13].

The government of the Oblast together with the heads of municipal formations developed activities to attract physicians to the region (it was provided the payment of a lump sum of 6 salaries and additional sum – 200 thousand rubles, monthly premiums – 20% within 3 years after graduation, accommodation provided by the employer), but staffing problems remain unsolved.

Inadequate medical staffing, along with the lack of necessary equipment produce the problem of low availability of certain types of medical treatment (CT and magnetic resonance imaging, vascular ultrasound, echocardioscopy, etc.).

Remain unresolved problems of financing the provision of health care to the residents of the region within the Territorial program of state guarantees for free medical care – lack of the program in 2009 amounted to 39.6% in 2010 – 33.6%.

However, health system capacity of the Murmansk Oblast in generally is higher than the average for Russia, but only at the expense of high level in Murmansk and Kirovsk. While in most municipalities health system capacity is low. This indicates a very low level of access to health care. A large proportion of the inhabitants of the Oblast evaluate the availability of health services as low: according to opinion surveys, only 30.4% [1] of the respondents in the Murmansk Oblast were satisfied with the availability of medical services.

In many municipal formations of the Oblast provision with physicians and nurses, hospital beds is at a low level, it is still difficult to obtain certain types of specialized medical care. Many medical institutions due to lack of resources, level of training of health workers on modern approaches to diagnosis, treatment and prevention of diseases can not provide adequate access to and quality of diagnostic and medical care. There are no regulations aimed at creating conditions for healthy living, providing comprehensive nature of the activities of all sectors of society in order to improve health [7].

At present, the region implements the long-term target program "Modernization of the health of the Murmansk Oblast" for 2011 – 2012. The main objectives of the program are: 1) ensuring access to quality medical care to the population of the Murmansk Oblast and 2) creation of conditions for the efficient organization of medical care and use of health resources [1].

However, within the framework of implementation of the Program was provided a significant reduction in the availability of quality health care, because it assumes a significant reduction in the network of health institutions from 59 facilities (21 governmental and 38 municipal) in 2010, to 35 (35 public health institutions and 15 their affiliates) by 2013.

It is planned to create three inter-municipal centers of specialized medical care in Kandalaksha (for residents of the Tersk and the Kandalaksha districts), in the cities of Kirovsk-Apatity and Monchegorsk (for residents of the Kovdor, Lovozero districts and Olenegorsk). In these centers most of the departments and agencies are expected to be moved, while in other localities will be provided, in general, the basic types of medical care. As a result, the availability of specialized medical care for the residents of most settlements of the Murmansk Oblast will be much worse. This will involve, firstly, a significant deterioration of transport accessibility (for example, the distance between Kovdor and Monchegorsk is 184 km.) Secondly – with an even greater decline in availability of medical personnel and hospital beds.

For example, the organization of inter-municipal center in Kandalaksha it is planned to reduce beds by 11%, in the Tersk district – by 48, in the Zelenoborsk affiliate – by 69%. A similar reduction will affect the health institutions in creating the Monchegorsk and Apatity-Kirov inter-municipal centers: in Monchegorsk it is planned to reduce beds by 12%, in the Olenegorsk affiliate – by 17, in Kovdor – by 40, in Lovozero – by 34, in the Apatity affiliate – by 42%. The reduction will affect only a little number of beds in Kirovsk, where it will be reduced only by 1.7% [1]. Also there will be the change of the medical care structure to the reduction of hospital and ambulance services *(tab. 2)*.

Table 2. Organization of medical care in the inter-municipal centers of the Murmansk Oblast [1]

Indicator	Inter-municipal center of Kandalaksha		Inter-municipal center of Monchegorsk		Inter-municipal center of Apatity- Kirovsk	
	01.01.2010	01.01.2013	01.01.2010	01.01.2013	01.01.2010	01.01.2013
Number of beds	378	307	831	660	624	473
Volume of hospital medical assistance (bed/days per 1 inhabitant)	1.6	1.3	2.2	1.8	2.1	1.7
Volume of outpatient and hospital medical assistance (visits per 1 inhabitant)	6.64	8.58	8.46	9.45	7.87	8.52
Volume of hospital-substitute medical assistance (patient / days per 1 inhabitant)	0.29	0.53	0.36	0.66	0,32	0.51
Volume of emergency med. assistance (calls per 1 inhabitant)	0.37	0.35	0.36	0.34	0.33	0.32

As a result, these transformations will have extremely negative impact on the quality of medical care, timely diagnosis of diseases, etc., and, in general, the level of health of the population of the Murmansk Oblast. The current level of health system development, not allowing to realize its compensation function (which is a prerequisite for reducing the quality of human potential, has no positive effect on the preservation of existing human resources, etc.), only worsens. Availability of health services will be reduced significantly.

At the present time it is vital to form and implement both state/national policy on health protection and own active regional policy. There are basic conditions that will ensure the effectiveness of policy implementation in the health protection sector. Firstly, human capital should be seen as the goal of social development, and not as a means of solving social and economic problems [14]. Secondly, the formation and implementation of policies in the health sector should be focused on patterns of development of the social system in relation to public health, not to the assessment of the influence of individual factors on human health. Thirdly, the problems solution must be comprehensive, covering all sub-systems of the region in public health protection system, and not be just limited by the activity of health care institutions.

In general, the policy in the health protection sector should be understood not only as a series of measures to improve the health of residents, but also as a process of formation and development of life, labor and reproductive capacity of the population with an adequate intake of human potential and the desire to create optimal living conditions (environment, economy and social conditions). Policies in the health protection sector need to be considered as a set of targeted activities conducted by public authorities, including the definition of priorities and policies, the nature of the formation of resources and the steps involved in achieving these goals, ensuring the development. From this point of view the systematic policy in the health protection sector should be expressed in the interaction of public and private sectors, regional authorities, health authorities, media, etc. In addition, it is necessary to expand capabilities of individuals and encourage them to take positive, health-promoting their own decisions on issues such as tobacco use, excessive alcohol consumption, unhealthy diet, unsafe sex, etc. Cross-sectoral policies in the health protection sector of the population (as reflecting the activity of the whole society) should be focused on public health criteria. A major factor in the implementation of the policy in the public health protection should be just the health care system.

The aim of the policy in the health protection sector must be increase in the level of health through modernization of the health care system including ensuring high standards of the quality and accessibility of health care.

In order to provide for the health system of the northern regions of Russia, including the Murmansk Oblast, it is necessary to solve the following problems:

At the federal level:

- to strengthen significantly the measures of state regulation and protectionism in the development of the health system of the northern regions of the Russian Federation aimed at total quality increase and accessibility of health services, a significant increase in public satisfaction with the quality and accessibility of such services;
- to ensure the implementation of the differentiated state policy in this area, taking into account the specific features of the northern regions (including low financial resources, weak personnel and infrastructure capacity, the remoteness of most settlements from major centers, demographic characteristics, etc.);
- to develop and implement special measures of state subsidiary support, providing a new development level of health facilities of remote rural settlements, small towns, closed administrative-territorial units, including the creation and development of modern medical facilities, transportation infrastructure, to achieve the highest quality standards and a significant increase in the availability of health services;
- under formation within the framework of federal targeted programs aimed at the development of health services in small towns, closed administrative-territorial units, remote and rural settlements of the northern territories of Russia, to exclude the obligatoriness of application of the principle of parity co-financing from the federation to which these settlements are territorially related;
- under the development of regulatory indicators of personnel and infrastructure provision of health facilities to take into account the need to apply higher values in the Far North and equivalent areas.

At the regional and local levels:

- to ensure the free provision of state-guaranteed volume of medical services to all residents regardless of social status and place of residence, to develop and implement programs aimed at the creation and development of modern, meeting high requirements, medical facilities in remote, rural settlements and small towns, CATU; to achieve the highest quality standards of health care services; to promote the development of mechanisms of social partnership of government, business and society in health protection sector, improving health and environmental issues;
- to provide a significant increase in access to quality health care services rendered to the population; to provide conditions for the organization of primary, emergency and specialized medical care, conditions for improving the diagnosis and prevention of diseases; to improve the organizational and economic potential of health care system, including the development of a system of health care management, focused on fundamental improvement of the quality of medical care and efficient use of health resources;
- to promote the conditions for securing highly qualified personnel, including on the basis of a significant increase and a fundamental change in people's living conditions and wages increase of all groups of health professionals to the average for the region's economy; to increase staff capacity of health care institutions, including implementation of programs to target training of medical personnel from the local population, including representatives of indigenous peoples;
- to provide a new level of the development of the material and technical base of health care institutions aimed at improving the

total quality and accessibility of health services; to provide health care facilities with the latest medical equipment, medicines, etc.; to implement the strategic management techniques and methods of analysis of economic efficiency of medical programs and technologies in health care institutions;

- to promote the formation of an effective system of prevention of risk factors for health problems, particularly alcohol and drug abuse, promote healthy and safe environment, quality and safety of consumer products and services, reduce the number of jobs in hazardous working conditions, etc.

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UDC 332; 552.578

Substantiation of the priorities of the regional oil-and-gas complex development

The development of the oil and gas extracting regions is mainly determined by evolution of the development of the resources of hydro-carbonic raw material. Consideration of the prospects of the mentioned territorial formations allows maximizing social and economic benefits of the oil and gas extracting. In the article the features of functioning of the base sector of the northern raw region are analyzed. The criteria are offered and the prior directions of the development of the regional oil-and-gas complex are determined.

Oil and gas extracting region, regional oil-and-gas complex.

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The importance of the oil-and-gas complex in the economy of Russia is hardly can be overestimated. It is the guarantee of the country's power safety. More than half of the currency receipts are provided by the export of hydrocarbonic raw material. And in the long term perspective the importance of the oil-and-gas complex will be kept.

In the regions where the oil extraction is carried out, the regional oil-and-gas complex which consists of enterprises, processes, material resources connected to the search, exploration and oil and gas extraction is formed. The structure of its participants is always very mobile and depends on the dynamics of the extraction conditions, and also on the period

of the oil-and-gas territory's development. The most important participants of the regional oil-and-gas complex if the federal centre and the subject of the Russian Federation representing the interests of its population, vertically it consists of integrated companies and subjects of the small-scale and medium-scale business in the oil-and-gas sector. Now the main part of oil extraction is carried out in Khanty-Mansiysk and Yamalo-Nenets Autonomous Okrugs. In 2009 the share of these regions was more than 62% of the oil extracted in the Russian Federation, including gas condensate *(tab. 1)*.

The basic oil and gas extracting region of the country is Khanty-Mansiysk Autonomous Okrug. For the period of the oil-and-gas resources' development in the region's territory it was extracted more than 9.5 billion tons of oil.

In our opinion, Khanty-Mansiysk Autonomous Okrug has entered the initial phase of the falling extraction which is characterized by the reduction of the volumes of hydro-carbonic raw materials' extraction and complication of the conditions of the deposits' operation *(tab. 2)*.

In the structure of the economy of the region the densities of sector "Minerals' extraction" is very high and on the basic parameters there is the range from 66% to 93% *(tab. 3)*. Such structure of the economy allows receiving more incomes, but complicates the service modernization. On the volume of investments into the fixed capital Khanty-Mansiysk Autonomous Okrug is one of the leaders in the Russian Federation. The region has a high integrated investment rating. However, the basic investment projects are mainly connected to the functioning of the fuel and energy complex.

Table 1. Oil extraction, including gas condensate in the oil-extracting regions

	Index, million tons			
	1980	1990	2000	2009
The Russian Federation	546.8	516.2	323.5	494
Yamal-Nenets Autonomous Okrug	0	1.2	4.5	18.7
Khanty-Mansiysk Autonomous Okrug	304.9	306	180.9	268
	%			
The Russian Federation	100	100	100	100
Yamal-Nenets Autonomous Okrug	0.5	11.5	9.9	8.2
Khanty-Mansiysk Autonomous Okrug	55.8	59.3	55.9	54.3
In total	56.3	70.8	65.8	62.5

Table 2. Parameters of the development of oil deposits of KMAR in 2007 – 2010

Parameters of the development	Units of measurement	2007	2008	2009	2010
Daily average oil extraction	thousand of tons per 24 hours	762.8	758.5	741.3	728.7
Putting into operation new chinks	units	3311	3488	3456	3762
Operating oil fund	thousand chinks	60.4	61.8	62.9	64.5
Non-operating oil fund	thousand chinks	10.6	10.2	10.3	10.1

Table 3. Densities of the sector "Minerals' extraction" in the economy of the Khanty-Mansiysk Autonomous Okrug, % [1]

Parameters, year	2006	2007	2008	2009
In the structure GRP	72.0	69.6	66.4	-
In industrial production	93	90	87	87
In investments into the fixed capital	68	71	70	72

The investment situation in the region can hardly be considered safe. More than 70% of the investments go to only one sector of the regional economy – to the extraction of minerals; and the development of all other sectors occurs due to the investments from the budget. The tendencies of the region's development allow drawing a conclusion about the continuation of the "oil scenario" when the investment appeal of the alternative (non-raw) branches of the regional facilities is kept at the stably low level.

The budget of Khanty-Mansiysk Autonomous Okrug is characterized by the unstable condition. Besides the world markets of oil, the instability is annually ruled by the changes in distribution of the resource incomes among the center and the regions, by the changes of the nature of the resource taxes. As experts consider, sharp changes of the federal rules bring even more instability into the budget of the region, than fluctuation of the world prices for oil *(fig. 1)*.

In 2010 in the total amount of the taxes collected in the territory of the Russian Federation, the share of the Khanty-Mansiysk Autonomous Okrug made 13.7%.

The basic volume of taxes' receipts and other payments is provided with the tax for minerals' extraction (71.9% from the total amount of receipts).

In the structure of the budget of the Khanty-Mansiysk Autonomous Okrug the tax receipts occupy almost 90%. In 2010 the first place in the structure of the tax incomes the tax to the organizations' profit occupied 36.5%. The increase in the price for oil from 60.74 dollars for barrel in 2009 to 78.05 dollars for barrel in 2010 caused the increase in the consolidated budget of the Khanty-Mansiysky Autonomous Okrug for 9241.7 million rubles. The resulted data testify to the steady dependence of the economy Khanty-Mansiysky Autonomous Okrug on the situation in the oil-and-gas sector.

Strengths of the regional oil-and-gas complex is the presence of the globally competitive business-structures – the oil-and-gas companies having high investment potential, powerful and ramified oil-and-gas transporting system. In 2010 the basic volume of the oil recovery in the territory of Khanty-Mansiysky Autonomous Okrug provided 10 vertically integrated oil companies, which extracted 99.5% from the general oil extraction in the region *(fig. 2)*.

Figure 1. The dynamics of the oil extraction and incomes of the consolidated budget of the Khanty-Mansiysk Autonomous Okrug for the period 2000 – 2010 [2]

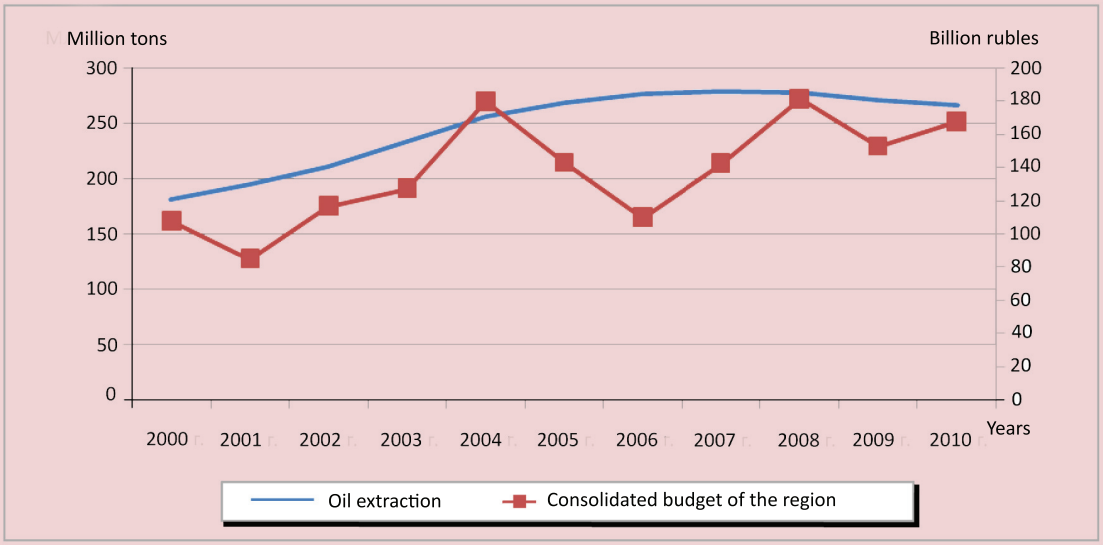

Figure 2. Oil extraction in the cut of the oil companies in the territory of Khanty-Mansiysk Autonomous Okrug, thousand tons [2]

However, only two of them showed positive dynamics in oil extraction: Open Society "Gazprom oil" (+ 1357.4 thousand tons) and oil complex "Salym Petroleum Development" (+ 619.6 thousand tons).

The weak points are connected to the essential deterioration of properties and structures of oil actives, slow rates of modernization of the resource companies and all institutional structures of the oil-and-gas complex. The majority of large and huge oil deposits of the region are at the stage of falling extraction, 70% of the current stocks of oil concern to the category of the hard-extracted ones. Water cut of the working chinks reached 80% [4]. The rates of introduction of innovational technologies in prospecting and extracting works are the slowest.

One of the important parameters of the oil-and-gas complex is the condition of the mineral raw-material base. The maximal volumes of explorative drilling in Khanty-Mansiysk autonomous region of approximately 1500 thousand m were achieved in 1987 – 1988. By 1994 there was their sharp reduction to 350 thousand m. Introduction of the tax to reproduction of the mineral raw-material base allowed to restore geological prospecting of the region and to achieve direct completion of the extraction by stocks. In 2001 the volume of explorative drilling made approximately 1 million m. After cancellation of the given tax and transfer of management over the prospecting works to the level of federal bodies there was a sharp reduction of drilling to 300 – 320 thousand m a year. For providing annual oil recovery at the level of 280 million tons escalating of the volumes of the prospecting works is necessary. According to the Scientific Analytical Center of the rational entrails' exploration named after V.I. Shpilmana, for the achievement of the strategic parameters of raw material's extraction it is necessary to carry out 1.4 million meter drilling.

Scientists of the Center estimate the period of restoration of geological prospecting in 12 years with finishing the amounts of works to 1.5 million m by 2020 [5]. In 2010 at oil extracting 266 million tons the volume of explorative drilling for hydro-carbonic raw material made 300.1 thousand m. It almost 2 times less than the necessary rate for the achievement of the strategic reference points.

The economy of oil and gas extraction region is super-nature-using one [6]. Khanty-Mansiysk Autonomous Okrug takes the second place (after Krasnoyarsk region) on the emissions of the polluting substances into the atmosphere, basically due to burning oil gas. The interest of its recycling in 2010 made 86.4 %. The gas of oil deposits of Khanty-Mansiysk Autonomous Okrug differs by the high contents of heavy hydro-carbons and represents the most valuable raw material for gas chemical production.

The criteria of the priorities' choice of the regional oil-and-gas sector of Khanty-Mansiysk Autonomous Okrug are caused by the urgent problems and tasks of providing oil extraction and gas at the level of 280 million tons.

Following this orientation, to the criteria of the priorities' choice it is necessary to refer the academic basic researches in the sphere of oil extracting. Despite of the increase in volumes of the research works concerning the technologies of the deposits' development, spent by the oil companies; it is not enough fundamental scientific researches. The creation of innovational technologies without studying thin rock structures (from micrometers to nanometers), definitions of hydro-dynamical and power structure of the initial current stocks of oil, studying of interaction of rocks with layers' fluids, modeling of processes of filtration with the use of laws of the molecular-kinetic theory, the use of opportunities of various physical fields for the increase of efficiency of development now is impossible. Modern innovational technologies assume gas, water- and thermo-gas influence on productive layers, development in the mode of a foamy filtration of fluids, thermal, biological, acoustic, wave methods, surface-active substances, polymers, etc. [7].

The specificity of the mineral raw material base of Khanty-Mansiysk Autonomous Okrug is also determined by the presence of oil fields. The features of these layers are the high saturation of the high-quality oil. Now there is no 100 % effective technique of extraction of hydro-carbons from the given sort of deposits [8]. The development of new technologies of the oil extraction is necessary.

Similar ideas are capital-demanding; however, it is the major directions of stabilization of the oil extraction in the conditions of deterioration of the raw-material base, increase water use layers, reduction of chinks. Accordingly, the priority should become the use of the technologies, allowing to raising the factor of extraction of oil from various kinds of deposits.

Recently the growth of the stocks does not provide steady functioning of the oil complex. It is necessary to raise and to increase the quality of prospecting works. In the Soviet Union the geology was competitive branch not only in the country, but also in the world. The begun backlog before the system crisis of the country in 1990th has been aggravated with the further inattention to branch at the state level. In the result, at the further inactivity in geological prospecting the level of the oil recovery will be reduced. Therefore to the prior directions it is necessary to refer innovational development in the sphere of geological prospecting.

The modern mineral raw-material base of hydro-carbonic raw material is submitted by mainly fine and smallest deposits with taken stocks less than 10 million tons and complex conditions of development [9]. Great financial investments and innovational approaches are necessary for the development of such deposits. The small companies are most susceptible to

innovational decisions.

At the same time, working legal certificates, the legislation on taxes, not to the full take into account the specificity of the activity and the features of the small-scale and medium-scale companies of the oil-and-gas complex.

The institutional factors interfering the reduction of costs in the oil or gas extraction are basically connected to imperfection of the taxation and organizational structure of oil-and-gas sector, with insufficient development of the market relations.

Among these factors are:

◆ inadequacy of the system of taxation to the modern conditions of functioning of oil-and-gas sector in the region;

◆ low level of competition in the oil-and-gas sector that does not create permanent internal stimulus for the costs' reduction;

◆ insufficient space for the activity of independent small-scale and medium-scale companies characterized by a high degree of mobility, including in the sphere of innovations;

◆ backwardness of the market of the industrial technological services, therefore there are no objective criteria for estimation of the efficiency of the performance of many kinds of works in the oil-and-gas sector (drilling, repair of chinks and equipment, arrangement of deposits and so forth) [10].

Now institutional factors actually render constraining influence on the development of the oil-and-gas sector in such region, as Kyanty-Mansiysk Autonomous Okrug. The prospects of providing favorable dynamics of the oil extraction in the region in many respects are connected to the opportunities of the reduction of all complex of costs in the oil-and-gas sector, the development of new deposits with a rather low qualitative characteristics of stocks, prolongation of life of the old strongly exhausted deposits and deposits, which operation was interrupted by the forced development of the last years. The solution of the mentioned problems demands the creation in the oil-and-gas sector certain institutional environment based on competition, stimulating role of the state and partner relations between the state (on behalf of the federal center and region) and oil-and-gas business [11].

In view of the stage of the development of hydro-carbonic resources and the quality of the mineral raw-material base of Khanty-Mansiysk Autonomous Okrug we offer the following priorities of the development of the regional oil-and-gas complex within two key directions.

The first direction is connected to the solution of technological problems of the development of small, complex in the geological attitude, deposits.

To the priority of the directions of the development of the regional oil-and-gas sector it is necessary to state:

• the transition to the high industrial technologies of the oil extracting, allowing to commission both new, and nowadays idle chinks in the used deposits at the substantial growth of the oil extraction degree;

• the development of technologies of the oil extraction from the deposits with the subsequent full-scale operation of the mentioned deposits.

• application of methods of the increase in petrol-feedback of layers (layer-smoothing technologies, drilling of horizontal chinks, etc.);

• the use of the maximum ecological technologies at all stages of the deposits' development.

The second direction is connected to the necessity of reforming of organizational structure of the branch for the benefit of the greater share of independent small-scale and medium-scale companies. As the prior we consider the following directions:

✓ formation and development of the competitive environment, creation of normal conditions for the activity of independent small-scale and medium-scale companies;

✓ development of the "premium segment" (geophysics, inclined drilling);

✓ use of the local manpower at the deve-

lopment of the deposits in the region.

The oil-and-gas sector in mono-raw regions is the basic source of the income of the regional budget; it provides employment of the population, carries additional social loadings. The achievement of the regional strategic purposes and maintenance of the social obligations in many respects depends on the efficiency of functioning of the regional oil-and-gas complex.

Following to offer prior directions of the development of the oil-and-gas sector in Khanty-Mansiysk Autonomous Okrug will allow to stabilize the oil and gas extraction that will positively affect the formation of the regional budget and will promote the improvement of the quality of life of the population.

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UDC 330.524 (620.9)

Challenges and opportunities of lifelong learning in the field of energy efficiency and new energy

The article deals with the concept of lifelong learning (LLL concept), which is used widely in the developed countries. It reflects the reasons for the concept's introduction in the field of energy efficiency and new energy in modern Russia as well as the advantages, opportunities and challenges of its adoption. The research contains the materials of foreign expeditions for the period from 2010 to 2011. The article also deals with the estimation of the legislative and regulatory basis for housing and energy-efficient policy. It is concluded that it is possible to develop the vast national potential in the field of new energy and energy efficiency by the introduction of the Life-Long Learning concept.

National potential, new energy, llifelong learning.

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The concept of lifelong learning (LLL concept) allows each individual to realize the personal potential at all ages, regardless of place, time and other circumstances: at work, at university, at school, at home and on the way home using all possible channels, means and methods [1]. The urgency of the practical implementation of the LLL concept is declared at the state level in our country now [2]. The government of Russia recognized in 2010 that lifelong education should become the foundation for the personal life success, national welfare and the country's competitiveness. This article deals with the LLL concept in new energy. New energy is a broad concept which includes the fact that is considered as the alternative energy in different sources. Researches in the field of new energy cover not only the problems of the creation and usage of innovative technologies to produce energy, but also various activities for energy conservation and energy efficiency. It is a new rapidly changing area of scientific knowledge, which lies at the junction of technical, environmental, economic and political sciences. Since the new energy is a growing sector of the economy in the developed countries, the graduates of this trend in education are in demand in the labor market. The broad concept of "new energy" does not allow us to appraise all the possibilities of lifelong education for its development in this article. We have pointed out the organization of lifelong education in North-Western Europe mainly for the development of energy services in housing to population.

During the investigation the author tried to answer the following questions: What kind of education is the lifelong learning in the field of energy efficiency and new energy (LLL foreign scheme) like? What has gone of the lifelong learning in Russia? Are there any reasons to

apply new energy in the North-West of Russia? What are the key issues of energy conservation state policy? Who can cash in the introduction of the lifelong learning in the field of new energy? What are the main challenges of the lifelong learning? What are the advantages of the European innovative educational system of in the field of new energy? What is the actual result of LLL practical application in the West (case study)? What designer developments which are successful in the field of power efficient housing and available on the modern energy services market do innovative educational system use? What is the impact of the modern Russian regulatory and legislative base? Where, when and why should we introduce lifelong learning?

The research contains the materials of the expeditions of 2010 and 2011: Centre for Alternative Technology – CAT (demonstration ground), Powys, North Wales. Energy company "Organic Power" (energy technology of methane biogas usage), Somerset, the UK Energy Service Company (public service), Stafford, the UK Biofuel boiler room (residential area heating), Alta, Norway. The University of Keele, England. The natures of these organizations' activity are very different, but all of them are related to new energy technologies, as well as they are actively involved in the educational processes of appropriate courses of the university regional centers.

Formally, the LLL concept is manifested at the state level (both abroad and in Russia) in the creation of educational systems covering people of all ages. The LLL concepts were started to be created at the governmental level in the western countries in the late 80s [3]. The domestic draft concept of lifelong education in 2011 uses the same foreign terms. However, the Russian economic system is characterized by the discrepancy between the stated policy objectives and the policy itself. Therefore, it is important to consider the type of socio-economic environment where the plan for the development of lifelong learning mechanisms, stated by the Russian government for the period until 2015, will be implemented as well as it's necessary to take into account the ways of the plan's execution.

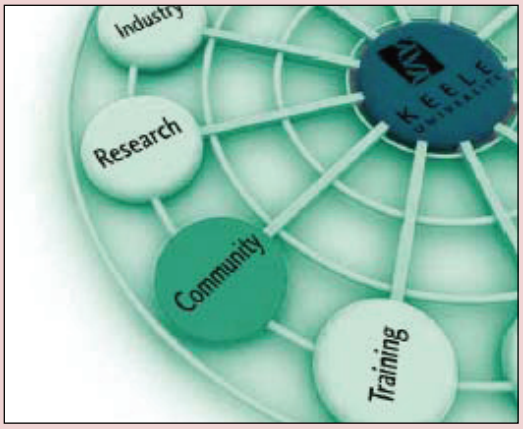
The structure of foreign educational systems can be represented in the diagram *(fig. 1)* which describes the Keele Hub for Sustainability created in Keele University. Structural organization and the real amount of financing of lifelong learning in the United Kingdom are presented in *table*.

The process of lifelong learning stimulates the active interaction between usiness, academics, teachers and community (i.e. it covers the whole population of the region).

Lifelong learning is widely distributed abroad; it goes beyond the scope of getting a degree for subsequent work. People realize themselves and their capabilities better; there are new positive connections between the people within the local communities. It makes the people and communities more flexible and strong [4].

There are substantial grounds to use widely new energy and the LLL concept in the North-West of Russia. Despite the northern geographical conditions, our country has huge potential for renewable energy development [5]. The educational systems, that focus on the development of energy-efficient technologies in housing (particularly for new housing) and transportation sectors, biofuel and tidal energy, are important for regional economic policy in the North-West of Russia, because there is a considerable potential for the development of these areas here. We can't note the Project for Building Energy Efficiency in the North West of Russia (00074315) by UNDP/GEF and the Office of Plenipotentiary Representative of the President of the Russian Federation in the North-West Federal District which was started in December, 2010[6]. The project's objective is to build local capacities and demonstrate local solutions to improved energy efficiency in construction and maintenance of buildings in the North-West of Russia.

Figure 1. The Keele Hub for Sustainability



Source: http://www.keele.ac.uk/keelehub/

Education expenditures in Great Britain, 2007 – 2008

Amount and structure of expenditures	bln. pounds sterling	%
Direct state budget expenditures for formal education and training	12.90	23.51
Direct state budget expenditures for advanced training programs	1.20	2.19
Direct state budget expenditures for the development of public employment sector	7.70	14.03
Immunity from taxation	3.70	6.74
Expenditure for the staff development within commercial organizations	16.20	29.52
The costs of self-employed people to develop their professional education	3.90	7.11
The costs of the local community and voluntary contributions in the public programs	0.63	1.15
The costs of the local community and voluntary contributions in the development of employment	3.15	5.74
Training costs of individual representatives	5.50	10.02
Total	54.88	100.00
Source: IFFL – Inquiry into the Future for Lifelong Learning.		

During the project they plan to develop and implement the training modules on energy efficiency to increase potential and improve vocational education; to establish an interregional professional development and staff retraining center at one of the universities in each of the three pilot oblasts: the Pskov, Vologda and Arkhangelsk Oblasts. The results of the project will be announced in December, 2011.

However, considering the prerequisites of the LLL concept for new energy in Russia, it is impossible to mention the major problems of the state energy conservation policy. "Despite the increasing relevance of renewable energy sources in Russia, the interest of Russian officials and business in the foreign experience in the development and implementation of renewable energy, as well as the growing desire of foreign producers to enter the Russian market with many proposals, the Russian legislative base isn't ready to adopt such concept as "renewable energy sources" [7]. This quotation from the forum ENERGY FRESH 2011 reveals a much greater number of issues than it can be seen at a glance. What exactly do western producers offer to our country? (They often export the products which are banned in their native countries). Why are the Russian governmental structures and businesses interested in the implementation of international developments?

The main beneficiary from the development of lifelong learning for energy efficiency and new energy is the state, because its energy

security is increased as a result [8], the internal social and economic sustainability is raised by the growth of human capital – the national capacity of the country. There is an original idea that "a prophet is not without honour save in his own country". So the author refers to the idea [9], where western experts, political scientists and economists note that since 2000 Russia has been trying to rehabilitate its greatness based on the military and energy security. Western observers [9] indicate that there is the third "pillar" of the modern government era in Russia. It is a political "pragmatism", which is generated by a mixture of cynicism, the spirit of profit and gross materialism. This factor in Russian politics is the main obstacle to every kind of security including the energy security and, as a consequence, it is the main challenge in implementation of the lifelong learning system.

Another challenge in the development of not only lifelong learning but also new energy in general is manifested in the fact that there is a strong lobby from the representatives of the traditional fuel energy, which are interested in squeezing out of the maximum profits from their production capacity, rather than in their early closing. The questions about the closing and extension of operation life are always brought up over the last decade. The tragedy of Fukusima in 2011 has poured oil to the fire.

In addition, our civilization is craving for energy nowadays, that's why it has to fix on fossil fuels. This fact gives rise to the global demographic changes, population growth, land and energy appetite. At the same time there is no smart solution [10]. Understanding of this fact is another (but not the last) challenge on the way to new energy and lifelong learning in this area.

The benefits of European innovative educational systems in the field of new energy are manifested in the fact that this educational area competes successfully with other areas because graduated specialists are in demand in the small businesses power enterprises that provide services to the public on the installation and maintenance of new energy facilities. Currently, there are special courses in all the training centers of the Nordic countries. They are aimed at the staff training for private energy companies serving the public. And they are not only the energy companies (for example, a local boiler house for biomass, municipal energy service company, filling station for cars on biofuel, etc.), but they include construction companies, because there is the constant toughening of requirements to the power balance of buildings under construction.

However, the innovative activity of students and teachers during specialized courses aimed at the training of specialists for further work with the new energy objects is carried out within the scope of different research projects. There are the experimental platforms that allow students to combine personal interests with diversified high-tech options for new power plants.

In addition, the innovative education systems create the programs aimed at the development of functional management structure in terms of energy production and the appropriate renewal of the content, methodology and resource support of the course. Teachers and students work in the innovation mode; they are interested in research activities. Current practice of engineering, educational and administrative tools of innovative activity change effectively the educational process for these courses.

At the same time innovative education systems form creative teams and professional methodological programs. They work in four main areas: ideological, technological, organizational and economic. Ideological area considers ergonomics, synergy, modern rationalism and humanization as the methods and techniques to update the process of decision making. Technological area deals with the innovative technologies that require radical changes in the understanding of new engineering solutions.

Organizational area forms the managerial structures which meet the requirements of lifelong sustainable development. Economic area works out the mechanisms for the development of various financing schemes including the specific practical projects and specialists' wages, as well as methodological support and material-technical base of education.

European innovative educational systems in the field of new energy grow continuously high creative potential. They work in the conditions of constant diversification of high-energy production and create the conditions for the qualitative development of professional competencies and creative abilities of students. Such innovative educational systems provide the behavior model which allows us to make the decisions in consideration of the changes in progress and working results, ensuring the sustainable development of an educational course and subsequent employment of graduates. That is, there is an obvious convergence of industrial and educational goals and their economic compatibility.

This fact is essential for the self-renewing staff of new high-tech and high-energy production and adaptation to the changing socio-economic space.

Talking about the actual result of the LLL practical application in the western countries, we should note the case study of solar panels and improved insulation properties of the walls and roofs in the house which was reconstructed from the former stables *(fig. 2)*. The owners were deep retired husband and wife which were about 80 years old. Payback period of the project was approximately 10 years. When I asked them "Why did they do that?" they responded the following story. They wanted to know what they could do in their house. So they sought advice by e-mail to their energy company. Then the specialists came and made energy auditing of their house. They received its results and recommendations to the cost of the measures and their payback periods by e-mail two weeks later. There was also a heat pump and a boiler change among the measures. The pensioners chose the solar panels and heat insulation for the walls and ceiling from a proposed list.

Figure 2. The actual result of the LLL practical application

The practical effect of the LLL concept in this case is show up in the UK residential sector primarily by the use of available information. The state encourages new energy advertising and creates the economic mechanisms which allow their residents to get comprehensive information quickly and free of charge that enable them to make all the possible decisions.

Western pragmatism recognizes that the paradigm of lifelong learning allows them to change vocational guidance and training, because in such situation supply responds quickly to demand for the professionals who are required by energy companies. Therefore, material, financial and intellectual resources are used more efficiently. As a result of the LLL concepts, there are new professionals, traditional specialists enriched with new knowledge, as well as "advanced" users of new energy services. There are blurred borders between basic and non-basic education.

It should be noted that the blurred borders phenomenon is expressed in the new terms during the creation of the LLL concept in Russia. So, there is a term "organization of lifelong learning" instead of a term "institutions of post-secondary professional training". Thereby, the sphere of post-secondary professional training was expanded by such new types of organizations as corporate universities, as well as by new forms of learning such as trainings [11]. In order to recognize the qualifications obtained through formal education and spontaneous training, they offer to create certificate authorities which will confirm that knowledge, skills and competencies of employees satisfy the qualifying requirements. The creation of such certificate authorities in Russia may become another bureaucratic "trough".

What do the participants of lifelong learning study in the field of new energy? The innovative educational systems of the developed countries use successful designer developments in the field of energy efficient housing that are available on the energy service market [12].

It is believed that heat from the sun, breathing and temperature gradient of soil can provide a stable temperature inside the building with a minimum of mechanical means. The projects on building energy efficiency use the computer three-dimensional models that show how the influx of solar energy to the building depends on the daily and seasonal position of the sun, as well as the influence of doors and windows placement, insulating properties of building materials, the efficiency of heating systems, ventilation and lighting, accommodating landscape climate. Such models help to make economic evaluation of cost and payback period of energy-saving innovations. They allow us to estimate the ecological balance of a building. Community heating and cooling system involves the use of highly efficient equipment and insulation, windows of high quality, natural ventilation and other approaches. Water heating load is reduced by a fixed water supply to the consumer (showers with buttons that give a portion of water until the next button is pressed), utilization of waste water, water heating by the sun and energy-efficient water heaters. The required lighting load in the daytime (up to 100%) can be provided by optical fibers that transmit light to different rooms (for example, basements). At night it is reasonable to use fluorescent and LED lamps, which are not heated. A variety of electrical loads can be reduced through the use of modern energy-efficient appliances and by decrease in phantom load of electrical equipment in standby mode (when the red light is waiting for a remote command from a remote control). It is now known that this phantom load amounts up to 10% of total electricity consumption in the house. For example, some buildings use the old technologies to reduce heat losses. They cover their houses with a soil layer with vegetation or insulate the walls with pressed straw blocks depending on local climate. People also use pre-assembled building blocks (wall panels, roof and landscape surface).

They utilize the heat which is thrown out in ordinary houses. For example, it is possible to use the heat of ventilation channels, hot water, combined heat and power, as well as absorption chillers (in contrast to the compressor refrigerators weed).

In the case of an individual (detached) house we can use various micro-energy technologies for electric supply and heating – solar cells, wind turbines, biofuels and solar collectors (in the appropriate season). Electrical networks help to cope with seasonal swings in consumption, as they allow us to export electricity to the network if it is in plenty and get it out the network with a shortage of its production. It is known that cost value and resources consumption efficiency increase if such buildings are combined at the local level in the house groups, districts, villages, etc. There is a loss reduction in transmission and distribution in such case. These losses are amounted to approximately 7.2 – 7.4% of the transferred energy. Topography affects the potential amount of energy. In order to eliminate the use of fossil fuels completely, it is necessary for a building's location to have geothermal resource, micro-hydro resource, solar and wind resources.

A combination of two strategies – energy saving and energy generating from renewable sources – is considered to be the most environmental solution. Since 1980 the developments of passive (energy efficient) buildings have been demonstrating that the house's heat consumption can be reduced by 70 – 90% in many locations, without the active capacity of energy production. The residents' behavior is varied by temperature and light indoors, by hot water and electrical household appliances usage and, accordingly, it greatly affects the amount of consumed energy.

That is, the concept of comfort is varied widely. For example, a study of similar houses in the U.S. with a similar set of tenants showed huge variations in power consumption; it was doubled in some cases.

These successful energy-efficient housing designs cannot be considered as available projects for mass consumers in modern Russia. Nevertheless, one can observe the emergence of a significant number of cottages and townhouses which often form the settlements of these types. If the consumer has enough money to buy or to build such house, it should be understood that the efficiency of the energy balance of the selected type of real estate will affect not only the cost of its maintenance, but the sales price. If you are going to use energy-saving equipment in your house or to connect to new energy sources, it is important to know that these technologies gave not only positive results during the years of their development. There are a lot of substandard and low-grade products in the modern Russian market of services for energy efficiency and conservation. Most of them are prohibited in those countries where they began to be used. That's why it is important to use solid and reliable domestic experience in construction.

In order to understand the current conditions for prospective participants in the process of lifelong learning in the field of new energy in Russia, it is important to consider the legislative and regulatory base of housing and energy conservation policy, because they define the environment where specialists have to carry out their professional activity and ultimate consumer has to use services including lifelong learning.

The Federal Law No. 185-FL "About Fund of Assistance to Reforming Housing and Communal Services" was adopted in June, 2007. It was extended up to 01.01.2013 by the Federal Law No. 441-FL of 29.12.2010 [13]. The objectives of the Fund are creation of safe and favorable living conditions for citizens and promotion of reforming housing and communal services, the development of the effective mechanisms for housing management, the introduction of resource-saving technologies at the expense of financial support from the Fund.

However, the 185th law is very heavily regulated; it is difficult to observe all the conditions required by the law. Besides, the Fund's money amount to a very small percentage of the real Russian requirements for the stated purpose.

The Federal Law No. 261-FL "On Energy Saving and Energy Efficiency Enhancement" was adopted in late 2009. Then the Order of the Government of the Russian Federation No. 1830-p (as amended on 22.04.2010) "On Approval of the Plan of Energy Saving and Energy Efficiency Enhancement in the Russian Federation" was adopted. The Russian Government adopted the Resolution No. 1225 "On the Requirements for Regional and Municipal Programs in Energy Saving and Energy Efficiency Enhancement" in December, 2009. That document established a list of targets (without specific numerical values!) in the field of energy saving and energy efficiency and due dates of energy saving and energy efficiency arrangements. Thus, the Federal Law No. 261 only mentioned the need to introduce energy efficiency indicators. Unfortunately, the development of indicators was deferred and entrusted with the government. And the system of indicators should be clearly defined in the law. It could become a measure of objective assessment of energy efficiency in our country [14].

The Presidential Decree of 13.05.2010 No. 579 "On the estimate of efficiency of executive authorities of Russian regions and local authorities of urban districts and municipalities in energy saving and energy efficiency enhancement" was issued in 2010. And then the Resolution of the Government of the Russian Federation 15.05.2010 No. 340 "On the procedure for establishing the requirements for the programs in energy saving and energy efficiency enhancement for the organizations engaged in regulated activities" (it was issued along with the "Regulations for the established requirements to the programs in energy saving and energy efficiency enhancement for the organizations engaged in regulated activities").

The project "Energy Efficient Quarter" is one of six projects in energy efficiency which was approved in autumn of 2009 by the results of a joint meeting of the Presidential Commission for Modernization and Technological Development of the Russian Economy and the Presidium of the Presidential Council for Science, Technology and Education. The pilot project "Energy Efficient Quarter" started practically in 2010 in four cities of Russia: Vorkuta, Kazan, Tyumen and Apatity [15].

The experience the city of Apatity showed that the project worked mainly with social infrastructure (schools, kindergartens and other municipal buildings). It was not a "quarter" for residential buildings, and point designs for the "elite" houses which were able to meet the requirements of the 185th law. There were very few such houses; they stood out against a background of other houses and caused the "bad" feelings of other people. On close acquaintance with the practical economic existence of those houses (for example, the house on Lenin Street, 14), it became clear that there was hard work by volunteer activists from those houses, who managed to unite the residents. At the same time, technical state of the building and financial opportunities of its residents were crucial.

In fact, the pilot project "Energy Efficient Quarter" could become the domestic analogous to the Western European lifelong learning. They have the same declared goals increasing the stability of local community; the same agents are involved; there is an accumulation of knowledge and experience of the population in the field of energy and resource saving. However, according to the Russian tradition, there is a clear gap between our desires and results. The bulk of the local community feels that they are shared unfairly with something. There is jealousy and other negative relationships. People feel themselves more helpless, and so the community doesn't become stronger and more stable due to the considered government's participation.

We can continue to analyze the results achieved by Apatity's pilot area, the emerging patterns of lifelong learning and develop methods of their use. But that's another topic for another article.

There are pessimistic doubts about the ability of the LLL concept to increase national potential, to improve energy security and to raise social justice in Russia. But it must be said in defense of the LLL concept that lifelong learning exists independently and permanently for everyone who is interested in it. Also there is a rule "If you are warned so you are defended". Nevertheless, we can't see the stability of the local community as a result of lifelong learning in Russian, but on the contrary, the alarms sound, they are spread around by online Internet forums. That's why we should pay attention to the western LLL concept where the government thinks its role in such a way to promote the sustainability of their local communities, giving them a sense of security and justice.

Comparing our energy policy in the housing sector with the European one, we can say that the Directive on the Energy Performance of Buildings – EPBD (it was adopted in 2002) has developed the standards for the following areas: energy certification (labeling) of a wide range of household appliances; efficiency standards of household appliances; performance characteristics of the boilers; measures to limit CO2 emissions by improving energy efficiency, energy performance of buildings [16]. However, EPBD offers only a general framework, while the EU member states have to do the main work. They should adapt these standards to specific climatic, economic, cultural and technical conditions. All of them are characterized by different levels of readiness; they will have to do a large amount of legislative work. Many of these countries have asked for extension of the EPBD implementation period which was originally installed in 2009. Due to of the differences between different approaches, EPBD was not implemented completely in Europe in 2009.

Most countries were reviewing their own energy policies in parallel with the implementation of EPBD. They identified the new initiatives for the promotion of renewable energy in buildings and for a special certification of environmentally sustainable buildings [17]. EPBD is one of the most important EU documents.

Thus, a comparative analysis of legislative and regulatory base for housing and energy saving policies has revealed a very significant inequality of the conditions for the development of the LLL concepts. It has tipped the balance against Russia, because the Russian policy leads to the gap between the country and the state. The modern LLL concept can become one of the tools to bridge this gap. It provides a positive role of the state through tax remissions and economic liberties to the participants of lifelong learning. These participants include the persons which are formally involved in basic education and training, in the advanced training programs, in the public employment sector. And they include practically all the local communities in whole. Commercial organizations and corporations provide the financing for lifelong learning of their staff. The local communities such as regional governments and municipal administrations can help to patronize lifelong learning in their territories. It is necessary to promote and encourage the volunteer movement in lifelong learning.

The old truths "people in trouble are left to themselves" and "fish rot away from the head, but you must gill it with the tail" are relevant again in Russia. So it is important for an average consumer to use lifelong learning in the field of energy efficiency and new energy right now and everywhere in Russia in order to defend themselves against the rising energy prices. It helps not only to increase energy security, but also to remove the social tensions caused by an acute sense of injustice and neglect at the significant part of population.

Educational programs graduates can work in the energy service companies which provide different energy services. Other independent students of lifelong learning programs can understand better what available services they can apply in their houses. At the same time it is necessary to build innovative systems of lifelong learning for Russian regions taking into account the best traditions of Russian and foreign educational experience, local national peculiarities and the special social significance of power engineering specialists.

The main task of lifelong learning systems in the field of energy efficiency and new energy is training of the competitive professionals who are able to satisfy the interests of stakeholders of the economic relations, as well as to adapt to the changing socio-economic space. Such education is certainly promising, because its development will not only improve internal socio-economic situation, but it can also improve the country's prestige in the international arena. Lifelong learning will open new opportunities for international exchange student programs. It will also attract foreign subsidies for the development of new energy in Russia.

Thus, the main challenges to the LLL for new energy in our country are the following: political "pragmatism" generated as a mixture of cynicism, the spirit of profit and rough materialism; frequent discrepancy between the stated policy objectives and the policy itself; unavailability of the Russian legal base to meet the emergence of new energy. In this regard, we can offer administrative structures the following advices to use LLL: it is necessary to develop state advertising of education and qualitative proposals in the field of new energy, to form a positive image of the state through tax remissions and economic liberties in the new energy sector, to promote and encourage the volunteer movement in lifelong learning. It should be noted that this work does not pretend to be exclusive and perfect. It is just one of many attempts to examine a wide range of the issues which attend the state project of the LLL concept.

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PUBLIC FINANCE

UDC 336.143

The budget process as a tool for managing the public and municipal finances: theoretical and methodological

The article shows that the essential tools for managing the public and municipal finances are emerged from the organization of the budget process because this process permeates all areas of fiscal activity of public and municipal authorities. The author emphasizes that the changes in the economic, social and financial policy of the state at a particular stage of development of the country influence over the budget process. The author has focused attention on determining the place and the role of local budgets in the general system of the country's budget process. He considers some new methods in budget planning and forecasting.

The essence of budget federalism, forms and tools for its implementation; modernization of budget federalism.

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In globalization of the world economy an effective management of public and municipal finances becomes a fundamental value for all countries in terms of the sustainability of their national budget systems and their overall financial security and stable economic growth. In this regard the budget process is the axis around which the control system of public and municipal finance-mi.

This is what is due to the fact that the content of the budget process is very multifaceted and multidimensional. Theoretical and methodological basis of its organization is scientific concept on public finances, in particular on public and municipal finances the leading link of which is the budget system of the country.

The latter, in its turn, acts as a major financial base of public and municipal authorities in the areas of economic and social development. During the budgeting process one can identify some possible ways to improve the management of the entire fiscal system of the country by using new approaches and methods based on the system of current theoretical and methodological concepts of public and municipal finances. With regard to Russia, for example, the current stage of transition to a new quality of economic growth – modernization and innovation growth with the actual start of active government policies in the area of structural economic reforms (diversification) presents

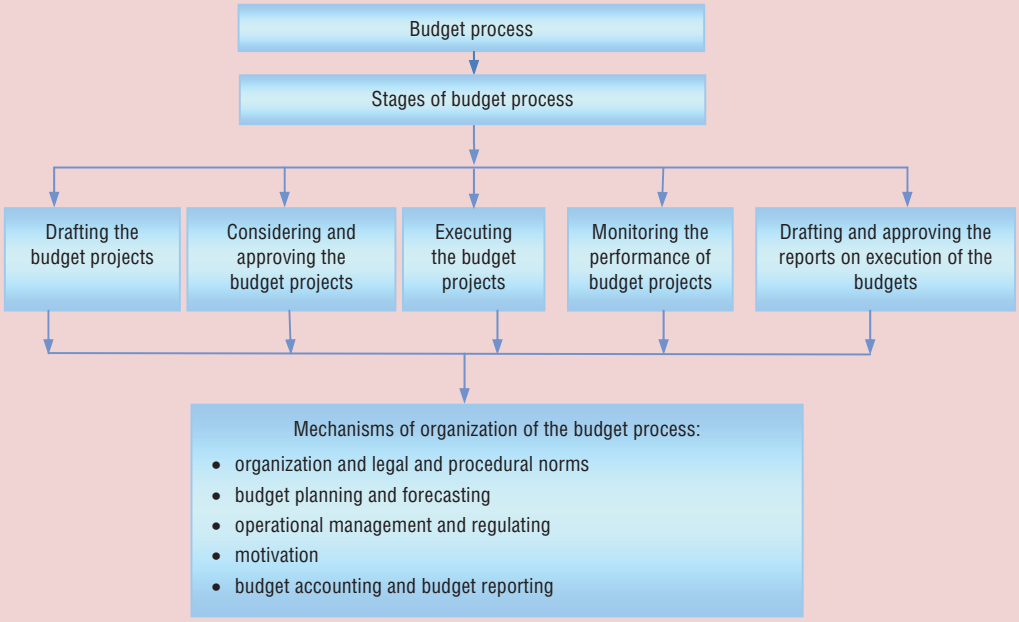
new progressive approaches to the budget process, respectively, and to the management of public and municipal financial system of the country.

The budget process is a set of consecutive phases (stages) of forming and executing the budgets, starting with the preparation of their projects prior to the approval of the reports on their implementation, subject to the objectives to create the centralized cash funds (public, municipal budgets and the budgets of state extra-budgetary funds) and to use them for financial support of the functions and tasks of the state and local authorities. In accordance with the Budget Code of the RF (Article 6) the budget process is an activity regulated by legislation of the Russian Federation, the activity of state authorities, local authorities and other participants of the budget process on preparing and considering the draft budgets, on approving and executing the budgets, on monitoring their performance, on implementing the budget accounting, on drafting, external audit, reviewing and approving the budget reporting.

The overall structure of the budget process in Russia and the mechanisms of its organization are represented in the form of diagram in the *figure* below.

Each stage of the budget process has its purpose, and they must be kept during the legislation terms and designated sequence. The budgeting process can last more than three years from drafting the budget estimates to approving the accounts on their performance. This period is called *a budget cycle*. During the budgeting process the concept of *fiscal year* is practiced too, it means the time during which a specific budget is performed. It is theoretically possible any term: from one day to several years. There are monthly, quarterly, semiannual, nine-month, annual, three-year, five-year budgets, etc. However, in practice the annual budget of the state is the most popular one, when the fiscal year amounts to 12 months. At the same time this period can begin since any day of the month. For example, the U.S. fiscal year runs from October, 1 to September, 30 next year, in Japan and Canada – from April,

The structure of budget process in the RF and the mechanisms of its organization



1 to March, 31, in Sweden and Norway – form July, 1 to September, 30 next year, etc. In Russia the fiscal year equated to a calendar year and runs from January, 1 to December, 31.

The budget process in any country implies a certain order and sequence of entry in the budgetary relations of different subjects that are the participants of this process, according to their functional purpose and the objectives appointed by the budget legislation.

The basic objectives of the budgeting process are:

- identification of financial and material reserves in the country;
- determination of the total budget revenues and the size of their individual sources in accordance with the forecast of socio-economic development of the country;
- establishment of the total budget expenditure and their trends based on the funding requirements of the government socio-economic programs and activities;
- reconciliation between the budget income and expenditure and the overall program of macro-economic and financial stability of the country;
- reduction and elimination of the budget deficit;
- regulating inter-budget relations for providing the balance of the budgets of all kinds;
- improving the scientific level of budget planning and forecasting;
- strengthening the control over the expenditure of budgetary funds for achieving their high performance;
- improving the management of the entire system of public and municipal finances of the country.

It is implied by the definition of the content of the budget process in the RF that it is regulated by the legislation. In this regard it should be noted that the general legal framework for the budgeting process in all countries of the world are fixed primarily in the Constitutions (in Basic Laws) of their states, which identify the major participants in this process (Parliament, President, Government, Ministry of Finance) and their core powers. In addition, there are special legislative and legal regulatory acts governing the budget process. For example, in the RF the organization of the budget process is regulated by the Budget Message of the President of the RF, the Budget Code, the relevant federal laws of the subjects of the RF and the legal acts of local self-governance, etc.

The legislative and legal regulatory acts governing the budget process contain the norms of the budget law representing the rules of behaviour for its members set and protected by the state to comply them and expressed their powers (in their legal rights and responsibilities). By the nature the norms of the budget law governing the budget process are conventionally divided into substantive and procedural norms. The substantive norms of the budget law set the budget organization and the budget system, the composition of revenues and spending priorities of the budget system, the powers of the budget process participants in obtaining the revenues and financing the budget expenditures etc. The substantive norms form the basis of the budget law in the budgeting process. As for the procedural norms of the budget law, they serve a subordinate, auxiliary role in regard to the substantive norms of the budget law. However, it doesn't detract from their practical importance, since they provide the correct application of substantive norms in the budgeting process in this country.

A distinctive feature of the procedural norms of the budget law is that they are procedural in nature and apply to all stages of the budget process. In addition, the procedural norms of the budget law play an important role, for example, in strict regulating the order of settlement of the differences arising between the legislative (representative) and executive authorities in reviewing and approving the budget estimates (creating the conciliation

commissions composed of the representatives of parliaments and governments), as well as in implementing other procedural issues on organizing the budget process.

Experience in the budgeting process in different countries shows that it has both common features and specifics. The latter are predetermined by the forms of state government (presidential form of government, parliament form of government, etc.) and different forms of government (unitary state, federal state, confederate state), and respectively, by the differences of budget structure and budget system of the country. For example, the federal states are characterized by the unity of the budget process and at the same time by its decentralization. The unity of the budget process is defined by common principles of constitutional and legislative base of its organization.

The most important principle of the budgeting process, which is common to all countries with a variety of them in the organizational scheme is the requirement that all revenues and expenditures, respectively, public and municipal budgets must be approved by the parliaments and other legislative bodies of certain countries. The legislative norms in many countries at the same time emphasize the need for ensuring the unity of the budget revenue and expenditure and including the specified revenues and expenditures in the budget in full and ensuring their balance.

However, as it was noted, the fiscal year amounting 12 months in all countries and it can begin on any day of the month and coincide or not coincide with the calendar year. In addition, in some countries (Germany, Russia, etc.) the state budget is usually adopted in the form of a single legislative act, and in some countries (USA, UK, Canada) the separate legislative acts are developed and approved on the items of income and expenditure of the mentioned budget. In the countries with a presidential form of government, including Russia, in the budgeting process the priority belongs to the President, who makes his annual Budget Message. The adopted budget laws must be promulgated (signed) by the Presidents of individual countries. In some countries (eg. Germany) a procedure of countersign, which provides for the promulgation of the budget law, then this law is published in the official gazette. Finally, the presidents have the right to suspensive veto, the use of which entails the return of the budgets for repeated review and approval by the parliaments.

One of the key procedural norms of the budget process is budget initiative. Under the law the right of the budget initiative belongs to the supreme body of executive power – the government (UK, Germany, etc.) or the President (USA, France, Russia and others). In no one country the Parliament has such right: its function is to amend and approve the budget bills proposed by the government of that country.

In most Western European countries the budget process in the central ministries begins 11 – 13 months before the start of the fiscal year. This means that, provided the fiscal year coincides with the calendar one, the budget process begins no earlier than December of the year t – 1 and no later than February of the year t. The draft budget for the year t + 1 is represented to the parliament 3 – 4 months before the start of new fiscal year, i.e. until early September and no later than early October. So, the governments, as a rule, spend 8 – 9 months on forming their budget estimates.

In Western Europe, where the fiscal year coincides with the calendar one, the government's schedule of work on the draft budget is as follows in a very simplified form *(tab. 1)*.

In Russia the budget process begins 10 months before the next fiscal year (budget year). In accordance with the Budget Code of the Russian Federation the budget process takes place in Russia at the following approximate schedule *(tab. 2)*.

Forming the budgets begins with drafting their projects. Drafting the budgets as the initial stage of the budget process in all countries under the law is an executive prerogative, i.e. their governments. Organization and technology of this work in different countries have much in common, and above all a community is de-centralization of preparing the budget estimates. It involves all ministries and departments that work out their financial plans and their revenue and expenditure budgets. In this case all ministries and departments receive planned targets of possible budget allocations from the Ministry of Finance; within each body this activity involves such different subdivisions, proposals as ultimately they are summarized by the minister or the head of the department. By-turn the budget calls with specific proposals from the ministries and departments are aggregated by the Ministry of Finance of the country.

In the course of drafting the budget estimates, the traditional budget process means that the participants of this process (ministries, departments and other participants) solicit for - but require – as much funds for next year as in the current fiscal year, plus a correction for the rising prices and wages (according to the inflation level). Of course, it begs the additional funds for the next fiscal year (budget year) and planning period (under the conditions of drafting a three-year budget) by new activities. The participants of the budget process often represent these wish lists on obtaining some additional funds. Such order of the budgeting process gives rise to bottom pressure on the Ministry of Finance in their budget activity on the part of drafting the budget estimates and this process becomes an expenditure-oriented one. The experience of significant number of countries in the world shows that with such model of forming

Table 1. A simplified scheme of the budget process by the months of the year in the countries of OECD (Organization for Economic Co-operation and Development)

January	The Ministry of Finance informs the schedule of work, formal instructions and macroeconomic preconditions.
February	The Ministry of Finance indicates the budget and policy objectives and restrictions.
March	The Government considers the priorities among the various fields of expenditure.
April	The branch ministries form the detailed budget proposals.
May	The detailed proposals are transmitted to the Ministry of Finance.
June	The Ministry of Finance considers the proposals.
July	Negotiations between the Ministry of Finance and the branch ministries.
August	Agreement within the government on the draft budget.
September	The draft budget is submitted the Parliament.
The budget process as a tool of effective management. Government concept. – Stockholm, 2005. – P. 48.	

Table 2. The budget process in Russia by the months of the year

January	Determination of macro-economic preconditions.
February	Proposals of the Ministry of Finance on the basic parameters of the federal budget (total revenue, apportionment of the expenses in general and the deficit / surplus)
March	The Budget Message of the President to the Federal Assembly of the Russian Federation (to the Parliament).
April	The Russian government takes the basic indicators of the draft federal budget (income, allocation of expenses according to the functional purpose and balance).
May	Apportionment of the expenses within the functional division by the budget-receivers and distribution into the categories of expenditure.
June – July	Overcoming the differences between the branch ministries and the Ministry of Finance of the RF, forming the detailed draft federal budget by the main administrators of income, by the main owners of expenditure.
August – September	Final registration of the federal budget bill in the government of the Russian Federation.
October	RF government representation of the federal budget bill to the State Duma for consideration and approval.

the budget it is difficult for the Ministries of Finance and the governments to resist this pressure for a long time. The budget process in which the initiative belongs to the budget-receivers and their ministries (the participants of the budget process) leads to the rapid growth of budget expenditures and tax burden which by-turn lead to large budget deficits and instability in the perspective of public finance development. In such expenditure-oriented budget process the decisions on some certain details of the budgets go from part to whole. This budget process is usually called the model of forming the budget "bottom-up".

Taking into account the existing fact of the above negative experience of tradition budget process, in recent years many western countries have introduced a new order of forming the national budgets. They reformed the budget process and instead of moving the «bottom-up» the budgets are formed "top-down". It means that the governments start to organize the budget process, in particular the drafting of the budget estimates with determining the budget and policy objectives or restrictions – such as borrowing requirements, the level of taxes, inflation, the level of expenditures, etc. For example, since the mid 90-s of the XX century Sweden has used the budget process with distinct features of moving "top-down". The Swedish government as well as the Parliament is guided by the restrictions calculated for several years and concerning both the financial saving (balance) and total expenditures of the state. This model of the budgeting process increases the role of state regulation in improving the public finance especially in crisis situations as it helps to keep public expenditure within reasonable limits, contributes to sustainable national economic development and provides timely on-budget flows of revenue.

It should be noted that in principle the model of budgeting "bottom-up" is suited more to the federal states. For example, in the Russian Federation in accordance with the RF Budget Code the budget system of the country is three-level (the federal budget, the regional budgets and the local budgets), but at the same time all of them are independent, i.e. lower budgets are not included into the higher budgets.

It means that the regional authorities of state power and the local authorities form themselves and execute their budgets. However, drafting the federal budget requires that a copy of regional budgets and consolidated budgets must be represented without fail by the regions to the Ministry of Finance of the RF, that is, it seems that the budget process with a distinct model of "bottom-up" is used. But in fact, the use of this model of the budget process in Russia is a mere formality, since the regional budgets (budgets of the Russian Federation subjects) are formed in the depths of the Ministry of Finance and the local budgets – in the depths of the financial authorities of RF subjects. It is the Ministry of Finance that determines the accumulated by the subjects revenues of their budgets, the performed expenditure from these budgets, financial relationships between the federal budget and the budgets of RF subjects, etc. Actually in budgeting the model of "top-down" is used, consequently the financial dependence of lower authorities from higher authorities is obvious.

In connection with the foregoing it should be emphasized that no government is able to ignore the whole (macro-level), making decisions about the details on forming the budgets, respectively and cannot approve the budget and political restrictions, without convincing that within the framework of these restrictions it can be possible to perform the most necessary expenses. It means that no country doesn't use the model of the budget process "bottom-up" or "top-down" in its purest form. In order to make the budget process survive in this political environment, the two approaches (two models) to forming the budget must come together in a kind of compromise point.

Forming the budgets doesn't end only with drafting their budget estimates at the initial stage of the budget process. It gets its logical continuation at the second stage of the budget process – *the stage of review and approval of the draft budgets*, and after a long detailed discussion some special laws (resolutions) on approving the budgets for the next financial year (fiscal year) and for the medium term are taken. At the same time under the law the review and approval of the draft budgets are exclusively a legislative (representative) prerogative, i.e. the parliaments' prerogative.

The parliaments' adoption of the laws (resolutions) on approving the budgets gives them legal status (force of legal law) which means their obligatory performance in strict accordance with the adopted laws (resolutions). In forming the budgets an objective necessity of review and approval of their projects throughout the world is due to the fact that the initial stage of the budget process, i.e. drafting the budget projects means only to a little extent that in fact it is taken the resolutions on what budget revenue and expenditure will be, and that, accordingly, the result of their performance will be like that. In drafting the budget projects the most part of budget revenue, for example, tax revenues, is impossible to determine accurately in advance. One can make decision on the taxation rules and the rates of various taxes, but the tax base to which they will be applied is determined in general by the socio-economic development which has a multifactorial nature. The same thing though to a lesser extent concerns the budget expenditure. For the budget expenditure defined by the rules of fund provision, in particular the transfers to individuals, the same principle operates as for the tax: it is possible to determine the size of subsidies and the conditions of their obtaining, but it is difficult to determine the exact number of citizens eligible for subsidies in advance, i.e. in drafting the budgets.

The answers to the above and other questions in forming the budgets should be obtained if possible at the stage of review and approval of their projects. In addition, in the course of discussing the draft budgets before their approval they are amended and changed a lot by the indicators of the draft budgets, which resulted in making some of their specified parameters more exact. But these issues are not decided at once, and this requires a certain time. For the final solution of these issues, for example, in Russia reviewing and approving the federal bill on the federal budget for next financial year and planning period pass through *three readings*, the procedures and objects of which are regulated by the Budget Code (Articles 199, 205, 206 BC RF). All of this suggests that the ultimate goal of the review and approval of the budget projects is formation of well-structured and realistic budget, execution of which will also be the most feasible and effective.

It is no exaggeration to say that the stages of drafting, review and approval of the budget projects lay a solid formation foundation which is at the same time the focus of political and economical life of most countries. In a market economy no single decision of the state and no political person can affect the national economy to so extent as the government budget project and the decision on it. Therefore, the budgeting issues inevitably arouse great interest among the public, mass media, management system, financial markets, businesses, organizations, and, of course, political parties and their elected representatives who take the budget decisions in the parliaments.

It is not difficult to see that the drafting of budgets, their review and approval as starting points for the budgeting process are accepted for the practical implementation of important decisions regarding the definition of the volume size, distribution and use of public budget resources. That is why the subsequent stage of the budgeting process – *the stage of budget*

execution has a very specific and important economic value, and it provides for full and timely receipt of all planned revenue and uninterrupted financing of budget expenditures. A well-functioning system of budget execution is designed to establish necessary balance between the control and the degree of freedom of improvement of revenue and expenditure transactions. Along with providing the results maximally close to the economic and political priorities of the state, it is the stage of budget execution that must ensure reliability and safety in working with public and financial resources.

The budget execution as a final stage of the budget process in different countries of the world is determined by a complex of national, historical, economic and political factors, including:

- the history and traditions of public administration;
- the organizational structure of the government of each country;
- budgetary and management philosophy, in particular the economic and political course of the country conducted by the authorities;
- functionality, efficiency and development of related functions of public administration (such as internal management control or external control system);
- kinds of problems being struggled with by the government of that country (corruption, weak governance, errors in the revenue payments and funding of the budget expenditures);
- development of the economy-related functions, such as the telecommunication system, banking system, etc.

In Russia a treasury system of budget execution has been established. The major role in the process of budget execution belongs to the Federal Treasury which enforces the principle of *treasurer's office unity* – entering all revenues and receipts from the sources of deficit financing to a single budget account and implementing all expenditure allowances from this budget account. Implementation of the budget transactions through the accounts of the Treasury makes it possible to provide a complete accounting and control over each stage of the execution of revenue and expenditure budgets.

An important role in executing the budgets is played by the legislative base and the established appropriate mechanisms. The legislative base regulated the budget execution is often complicated and consists of a number of different levels. In some countries the national constitution contains the provisions regulated the general aspects of budget execution. For example, in the US Constitution contains a provision prohibiting the budgetary expenditure outside the appropriations approved by the law when executing the budgets (Article 1, Section 9). Similarly, the Australian Constitution contains a provision whereby all budget revenues are placed into a single pool of money of the state (Section 83, Article 81). The Russian Constitution contains a provision whereby the Russian government develops and submits the Federal budget to the State Duma and ensures its implementation (Article 114, Chapter 6). In addition to these constitutional provisions the ordinary practice is to take extra special laws and a number of normative by-laws governing the budget execution. As applied to Russia – first of all, it is budgetary legislation, in particular the RF Budget Code which has a special section on executing the budget (Section VIII).

It should be noted that among the legislative and legal normative acts regulating the process of budget execution, the basic legal act is the budget act (the main financial act). The act in various countries can have a different name, depending on the jurisdiction, but practically there is always a special act that requires mandatory to enforce the budget revenue and expenditure. The primary annual financial budget law or the legislation act equivalent to it, as well as any applicable ancillary by-laws (instructions, provisions, etc.) that govern the budget execution process determine the procedures that are required to perform when

receiving revenue and authorizing the use of public budget funds (budget financing).

When executing the budget, the budgetary accounting and the budgetary reporting that are part of the budget process are kept. To ensure effective management of public and municipal finances on the basis of the laws (resolutions) on the budgets a decisive importance belongs to the availability of the necessary information at the right time and right place. In this context the budgetary accounting plays an important role in registering and providing economic information in a way that at all levels of public administration one could make reasoned decisions regarding further work on organizing the budget execution, as well as the implemented activity can be evaluated and analyzed to determine the extent of managers' responsibility for its results.

Budgetary accounting is an accounting system of public and municipal budgets providing information on the actual state of revenue and expenditure execution of these budgets, enabling an analysis of decisions made in the tax and budget sphere. The main objectives of budget accounting are:

- forming a complete and accurate information about the revenue and expenditure budgets execution of different levels of budget system of the country;
- control over observing the legislation on the budget execution;
- providing a basis for compiling the budget reports for the executive and representative bodies and other participants of the budget process.

The results of budget accounting are used to make *budget reporting* in the form of various financial report documents which can have different content and structure in different countries. However, the financial reports on the budget execution usually have information on the results and desired effects reached by the economic entities (participants) of the budget process.

At the same time these financial reports are consolidated in a variety of documents compiled by the budget participants. In this regard an important financial document of the budget reporting among the different report documents is *an annual report on the budget execution approved on a statutory basis*.

The issues of *improving the budget process* requiring special study is of important scientific-theoretical, methodological, legal and practical interest. Nevertheless, it is necessary to draw attention to the key areas for improving the budget process, their implementation is aimed at improving the effectiveness and performance of management of public and municipal finances.

Improvement of the budgetary process in all countries of the world is constant and uninterrupted due to the changes in the priorities of economic and financial policy of the state at a particular stage of the country's development. For example, in Russia an important step to improve the budget process was the Concept of budget process reform in the Russian Federation in 2004 – 2006 approved by RF Government Decree of 22.05.2004 № 249 "On the measures to improve the effectiveness of budget expenditures". The core of this reform was a shift in focus of the budget process from *"budgetary resource (expenses) management"* to *"performance management"* by increasing the responsibility and enhancing the independence of the budget process participants and the budget funds administrators under clear medium-term targets. Reforming the budget process was offered to implement the following five areas:

1) reforming the budget classification and budget accounting;

2) allocating the budgets of existing and assumed obligations;

3) improving the medium-term financial planning;

4) improving and expanding the scope of the program-target methods of budget planning;

5) putting in order the procedures for drafting and reviewing the budgets.

Within the framework of the above Concept of budget process reform on the first area drafting and executing the budgets of all levels of the RF budget system since 2005 are carried out *on the basis of new budget classification*. The new budget classification is closer to the requirements of international standards taking into account the changes of structure and functions of executive authorities within the administrative reform, as well as the introduction of account card of budget accounting integrated with the budgetary classification and based on applying the new method and monitoring to improve the management of public and municipal finances in the Russian Federation.

In accordance with the implementation of the budget process reform in the Russian Federation in the practice of budgeting there were introduced new concepts such as *"expenditure obligations", "budget obligations", "register of expenditure obligations"* that are provided by the RF Budget Code according to the Federal Law "On amendments to the RF Budget Code in regard to regulating the budget process and bringing some RF legislation acts in line with the RF budget legislation" dated 26.04.2007 №63 – FL. In addition, in the light of implementing the second area of budget process reform such terms as *"expenditure obligations currently in force"* and *"incurred expenditure obligations"* and accordingly *"budget of expenditure currently in force"* and *"budget of incurred obligations"* are used.

In the structure of the RF budget process (see Figure) but the organizational and legal and procedural norms one of the important mechanisms of its organization is the *budget planning and forecasting*. There is a close inter-relationship between the organization of the budget process and financial and budgetary planning and forecasting, because with budget planning and forecasting in the course of forming the budgets, in particular drafting the budget projects, one quantitatively determines the amounts of budget revenue and expenditure, financial relationship between the budgets of different levels and other parameters of budgets, etc. The quality of budgeting process, and respectively the efficiency level of management of public and municipal finance depends largely on the degree of scientific budgeting and forecasting.

In regard to improving the medium-term financial planning in accordance with the Concept of budget process reform in the Russian Federation (the third area of budget process reform) there was a task to extend its horizons and to move to drafting and approving *a three-year budgets*. With the adoption of the Federal Law of 26.04.2007 № 63-FL for a start the task was solved at the federal level. The first three-year federal budget for 2008 – 2010 was drafted and approved in 2007 in Russia. Since that time and up till now not only the three-year federal budget but the three-year budgets of the RF subjects and the three-year local budgets (for the next financial year and planning period) are drafted and approved. Moreover, any budget next fiscal year is a part of three-year budget that is annually updated and shifted forward by one year, on the one hand, this is ensured by the continuity of public policy and the predictability of budget allocations and, on the other hand, this makes it possible to amend it annually in a clear and transparent procedure in accordance with the priorities of the economic and social policy and the terms of their achievement.

Further, as noted above, the core base of the Concept of budget process reform in Russia was the transition from the "budgetary resources (expenditure) management" to "performance management" to improve the efficiency of budget expenditure. It is for this purpose that the RF Government Resolution № 249 22.05.2004 "On the measures to enhance the effectiveness of budget expenditures" was taken. In the light of implementing the require-

ments of this regulation the country headed for *improving and expanding the scope of application of program-target methods of budget planning* (the fourth area of the budget process reform). The program-targeted budget planning is carried out primarily in the form of federal target programs. *The target program* is a set of measures inter-related by the terms, the performers and resources and directed to achieving certain target and objectives.

Before 2010 in the budget planning and forecasting when preparing the draft federal budget the estimate form of budget expenditure planning had prevailed, i.e. the mentioned budget was not formed on the basis of actual and expected results of budgetary expenditure, but it was formed by indexing and correcting the funds allocated in the previous year. The funds allocated to the most targeted programs were in fact a kind of additional "estimated" funding of expenditure and almost constantly subjected to changing, thus justifying the amorphous formulation of program targets and results and the lack of responsibility for their achievement.

In 2010 for the first time the RF Ministry of Finance submitted a draft federal budget for 2011 – 2013 to the Russian government, it had a new format under which the mentioned budget was formed according to the so-called program-oriented principle, i.e. the expenditures of each of the ministries and departments are argued by the purpose on which the government is going to spend them. This measure is designed to ensure a stronger link between the budget planning and the target achievement monitoring. The RF Ministry of Finance and the Ministry of Economic Development have prepared a list of programs which became the basis for forming the federal budget and its main provisions in 2011. In total there are 39 programs divided into such units as education, public health, housing and communal services (HCS), social support, industry, economic regulation, management of public finances, etc.

While in 2010 the financing of 73 target state programs included no more than 8% of total expenditures of the federal budget, the 39 target state programs for 2011 united 96.7% of expenditures of the mentioned budget, it means that the control of the RF Ministry of Finance over spending of the federal budget expenditures increased excessively[1].

An important tool for the budgeting process in any country is *regulation of intergovernmental fiscal (interbudget) relations* which are an integral part of this process. The problem of improving the budget process and improving the quality of management of public and municipal finances depend on an efficient and fair system of intergovernmental fiscal relations to a large extent.

For example, today there is a rigid centralized system of intergovernmental relations in Russia and the budgetary resources continue to be redistributed in favor of the federal budget to the detriment of the regions' financial interests. In practice *the federal budget is essentially functioning as a centralized budget of unitary state*, and so the principle of real fiscal federalism is violated. In the integrated financial processes the state-level priorities take precedence over the region priorities and the financial dependence of the region and municipality authorities on the federal center is very high. It seems that first and foremost solving the problem of even development of innovative economy in all regions and increasing their own tax capacity can contribute to creating an efficient and fair system of intergovernmental relations in the country[2].

The issues of budgeting process in all countries, including Russia, are inseparably linked with the implementation of *public and municipal financial control* which is at the same time its integral part (see figure).

[1] Versiya, 2010. No. 38 (263). P. 9.

[2] Avetisyan I.A. The budget federalism and intergovernmental relationships in the RF. In Economic and social changes: facts, trends and forecast. 2011. No. 2 (13). P. 115-122.

It applies to all stages of the budget process and is one of the most important tools of management of public and municipal finances. In performing the authority's administrative functions the public (municipal) financial control is also a way of establishing a "feedback", since on the basis of data obtained as a result of this control, one justifies correcting the earlier decisions and plans, and most importantly, taking some effective measures to eliminate the offense in order to ensure the legality, appropriateness and effectiveness in forming and spending the public and municipal budgets.

In this regard it should be noted that to create an effective system of public (municipal) financial control there is a number of unsolved issues and problems in today's Russia. Conceptual approaches to forming a system of public financial control have not been developed yet; a common (unified) federal law on public financial control has not been adopted; there is no public (municipal) financial control of warning and preventive nature; there is a low level of realizing the materials of audits and inspections; there is a low level of executive discipline of control laws; there is no strict punishment for those who are responsible for the offense; unhealthy moral climate and other unsolved problems and issues of organizational and legal, methodological and practical nature reign in the country[3]. In view of the above unresolved issues and problems today in our country the public (municipal) financial control is imperfect, weak and poorly effective.

For example, because of low executive discipline of financial control by the RF Ministry of Finance over executing the basic financial law of the country, virtually all major sections of the federal budget have shortfalls.

According to the Federal Treasury's data, the shortfall of the federal budget for 2010 made up 164 billion rubles. This amount is equal to the annual budgets of several RF subjects, since the average size of the budget of the RF subject is 60 – 80 billion rubles[4].

Finally, the role and place of municipal finance, in particular the local budgets in the general system of budget process in Russia are worthy of attention too. In this area at present there are unresolved contradictions and problems of legislative nature. The essence of these contradictions and problems lies in the fact that local budgets (the budgets of municipalities) that constitute the foundation of the country's budgetary system are also the main financial base of local self-governance which is not included into the government system in accordance with the RF Constitution (Article 12).

It turns out that the public budgetary funds (local budgets, as well as the funds received from the federal budget and the budgets of the RF subjects) are used by non-governmental organizations (local authorities) and the local budgets are practically left out of the Russia's budget system, and respectively out of the general system of budget process in the country.

On the other hand, for all types of budgets included in the RF budget system the budget legislation, in particular the RF Budget Code, set common principles and procedures under which the entire budget process is carried out in the country. This situation undoubtedly has a negative effect upon the entire budget process and the quality of management of public and municipal finances. In our opinion, without solving the above mentioned legislative contradiction it is impossible to solve the problem of ensuring the integrity of the budget process and the complete improvement of its organization in our country today.

[3] Avetisyan I.A. On the public financial control in modern Russia. In: Economic and social changes: facts, trends and forecast. Vologda: Vologda Scientific and Coordination Center, Central Economics and Mathematics Institute of RAS, 2005. No. 34. P. 19-31.

[4] Soviet Russia, 2011, April 26. P. 2.

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UDK 336.132.11(470.12)

Topical issues of the improvement of intergovernmental dealings in the system of local government

The intension of "intergovernmental dealings" is expounded in the article. It deals with the main problems of intergovernmental dealings in the system of local self-government, which is a fundamental element of the budget system in the Russian Federation. It is difficult to transform the budget sphere of the country without strengthening of it. It is shown that the real local self-government in Russia is determined by the provision of municipalities with their own financial assets. The authors have analyzed the actual state of the financial relationship between the bodies of state power and local self-government. They have outlined a set of measures aimed at the improvement of intergovernmental dealings at the municipal level.

Finance, intergovernmental dealings, municipal level of budget system, own revenue, transfers.

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The essence of intergovernmental dealings

The Budget Code of the Russian Federation defines intergovernmental dealings as the mutual relations between the federal authorities, the public authorities of Federal subjects of Russia and the local self-government regulating budgetary legal relationships, organization and implementation of the budget process [1]. However, in our opinion, this definition has some serious shortcomings.

Many Russian and foreign scientists and economists study the problems of intergovernmental dealings. However, modern science hasn't developed a generally accepted interpretation of this concept.

The discussion is revolved around the issues related to the participants of intergovernmental relations, the reasons for their emergence and the sphere of their activity.

Table 1. Interpretation of the subject structure of intergovernmental relations by various authors

Author	Subjects if intergovernmental dealings
A.M. Babich, L.N. Pavlova, A.G. Igudin, A.S. Kolesov, O.G. Bezhaev, V. I. Grishin, O.N. Gorbunova, A.D. Selyukov, Y. V. Drugova	Federal authorities of Russia, public authorities of Federal subjects of Russia, local government
N.I. Himicheva, A.I. Zemlin, Y.A. Krohina, M.V. Karaseva	Official formations: the Russian Federation, Federal subjects of Russia, municipalities.
Y.I. Lyubimtsev, O.Y. Skvortsov	Budgets of all levels in their authorized representatives.
It is drawn up by the authors [3, 5, 6, 7, 8, 14].	

We have identified three approaches in examining of the current ideas about the subject structure of intergovernmental dealings *(tab. 1)*.

In our opinion, the first approach is true some more than others. Its followers mark out the public entities in their authorized representatives as the subjects of intergovernmental dealings. The concept of "intergovernmental dealings" defines itself that such relations must arise between the budgets and, therefore, between the subjects, which are the owners of budgetary funds. It is conditioned by the fact that many rights and powers in the budgetary sphere are the sovereign rights of the state but not of other subjects [6].

The question on the scope of intergovernmental dealings is highly controversial among scientists. It is not reflected directly in the legislation of the Russian Federation. Whereas, most of researchers consider that there are not only "vertical" but also "horizontal" intergovernmental dealings (A.G. Igudin, A. S. Kolesov, O. G. Bezhaev and others). We are holding with them in our research. In addition to this opinion, we think that intergovernmental dealings should be oriented to solve a twofold objective of vertical and horizontal budget balance.

Theoretical learning of intergovernmental dealings allows us to determine their essence as a complex system of economic and legal, vertical and horizontal interaction of public entities through their authorized representatives on the subject of the budgetary flows regulation in order to achieve an effective model of budget federalism[1] to ensure deserved standard of living to every citizen regardless of his or her residence.

The role of intergovernmental dealings is increased in the conditions of limited financial resources and in the reform period because intergovernmental dealings are addressed to solve the most pressing problems of elimination of inter-territorial and inter-level disproportions. They should also perform the function of social guarantees.

In order to avoid extreme population inequality in the citizen's opportunity to get necessary budgetary commitments, there are various channels of financial leveling:

1) Target transfers aimed at the implementation of their own expenditure authority. They include subsidies which are non-repayable budgetary funds which are extended without compensation to the budget of another level of the Russian Federation's budgetary system on co-financing terms to realize its expenditure authority.

2) Non-target transfers aimed at the implementation of their own expenditure authority. They include grants which are used to equalize budgetary capacity. They are non-repayable budgetary funds which are extended without compensation to the budget of another level of the Russian Federation's budgetary system to cover current expenses.

[1] The authors concur with such scientists as I.A. Avetisyan, Y.V. Drugova, A.G. Igudin, I.V. Podporina, V.I. Ptitsyn, etc. that budget federalism is a form of budget structure in the federal state, which involves all parts of the budget system into real and equal participation in the common budget process oriented to balance the interests of the state, Federal subjects and municipalities.

3) Target transfers aimed at the implementation of delegated authority. They include subventions which are non-repayable budgetary funds which are extended without compensation to the financial provision of the state authority submitted by a higher level.

When budgets are unbalanced vertically, intergovernmental dealings are necessary to bring the extent of expenditure obligations of each governmental level to conformity with the potential of its revenue resources [8]. This situation is typical for Russia. Due to the unregulated fiscal system in Russia, about 40- 60% of budget revenues are sent firstly to the higher budgets and then they are sent to the lower budgets in the form of transfers. However, education expenditures, social policy and health budgets are financed mainly at the regional and local levels.

Horizontal imbalance of the budget system is associated with the uneven economic development of territories and the differentiation of their income, especially tax potentials [12]. The highest level of budget imbalance is observed at the municipal level.

Thus, according to the Federal State Statistics Service, the gap between the most and the least prosperous local territories is by 75.6 times in Russia, while it is 8.1 in Germany, 8.5 in the U.S. and 1.6 in Canada. It is defined by the budget tax revenues per person.

There are less than 2% of municipalities which have their own revenue. In these circumstances, the essence of intergovernmental dealings consists in the budget leveling between the territories in order to get a standard set of significant social services for the population [8].

In this sense, intergovernmental dealings for the vast majority of municipalities are not just a certain range of social obligations to the population, but the most important factor in the stability of the socio-economic development in general.

Reformation of intergovernmental dealings in 2003 – 2010

One more reforming period in the Russian system of intergovernmental dealings had been completed by 2009. It concurred with the implementation of municipal reforms which were planned by the Federal Law № 131-FL "On General Principles of Local Self-Government Organization in the Russian Federation". Local territories were divided into three types (urban district, municipal district, settlement). Each type was provided with its own revenue and expenditure authorities. Several Federal subjects of Russia, including the Vologda Oblast, have been implementing the Federal Law in their territories since 2006. The declarations proclaimed that municipalities had got clear boundaries and independent revenue base. But there was a tax reform in 2005; according to it, the statutory amount of local taxes was reduced from 5 to 2 (personal property tax and land tax). In addition, the list and rates for federal and regional tax allocation to the local budgets had been reduced *(tab. 2)*.

These changes in the tax system during the reform of intergovernmental dealings were necessary to smooth the differentiation of income potential in the newly formed municipalities because they were extremely uneven in terms of economic development. The changes were necessary to align their budget capacity.

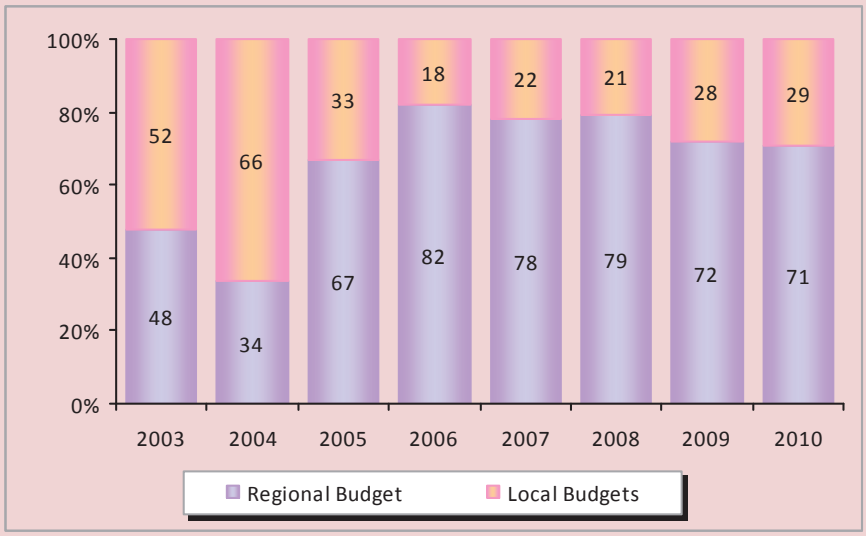
However, the result of this tax reform was a significant redistribution of tax revenues in favor of higher-level budgets. The flow of tax revenues to local budgets has declined in the Vologda Oblast from 52% in 2003 to 29% in 2010 *(fig. 1)*.

The taxes assigned to the local self-governments didn't support the municipal treasury (only 3 – 4% of revenues in local budgets). Therefore, the Federal subjects of Russia were permitted to refer additional revenue sources to municipalities in order to increase the tax base.

Table 2. Rates for federal and regional tax allocation to the local budgets, %

Tax yield	Before the reform (2003 – 2005)	After the reform (2006 – 2010)		
		Municipal districts	Settlements	Urban districts
Income tax (rate)	7	0		
Individual income tax	50 – 70	20	10	30
Tax on gambling businesses	50	0		
Excise taxes on vodka	35	0		
Property Tax	50	0		
Personal property tax	100	-	100	100
Land tax	50	100	100	100
Payments for the use of natural resources	65 – 80	0		
Single tax on imputed earnings	45 – 75	90	-	90
Charge for negative environmental impact	54	40	-	40
It is compiled by the authors according to the Federal Laws on the Federal Budget for 2003-2010.				

Figure 1. The distribution of tax revenues between the levels of budget system in the Vologda Oblast, %



Source: Authors' calculations according to the Treasury of the Russian Federation.

In this regard, the following rates for federal and regional tax allocation to the local budgets were enacted in the Vologda Oblast in accordance with regional laws:

✓ individual income tax – 10%;

✓ individual transport tax and tax under the simplified taxation system based on the patent – in full;

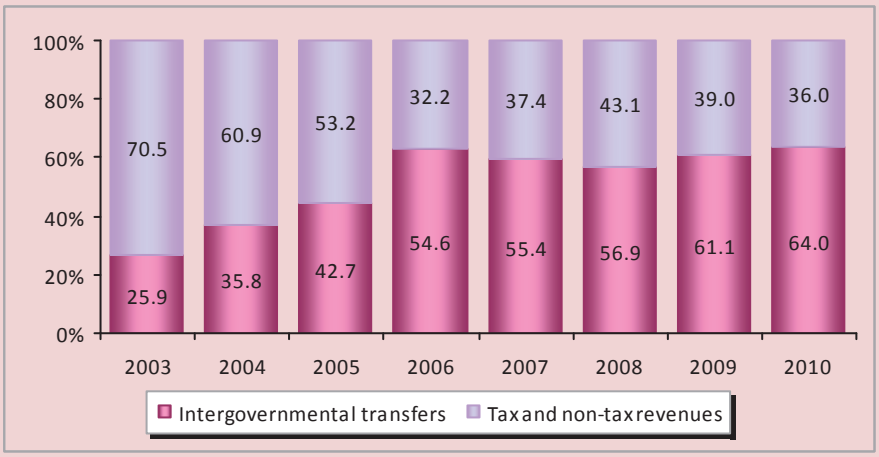
✓ single agricultural tax – 30%;

✓ tax under the simplified taxation system – 50%.

The oblast provided local budgets with additional tax revenues amounted to 1.4 billion rubles in 2008 and about 2 billion rubles in 2010. There is no doubt that single rates for tax allocation create equal conditions and opportunities for all municipalities. They also stimulate managers to increase the tax base.

However, we should keep it in mind that additional tax allocation and the system of intergovernmental dealings aren't the tools of own budgetary policy which is one of the most effective levers of public administration in the modern market economy. Local taxes have to regulate and stimulate municipal government some more than others.

Figure 2. The structure of local budget revenues in the Vologda Oblast, in % to total revenue



Source: Authors' calculations according to the Treasury of the Russian Federation.

However, the share of own revenues[2] in total revenues of local budgets is reduced. Municipalities are increasingly dependent on financial support of higher-level budgets. The share of intergovernmental transfers in the revenue structure of the Vologda municipalities' budgets increased from 25.9% in 2003 to 64.2% in 2010 *(fig. 2)*.

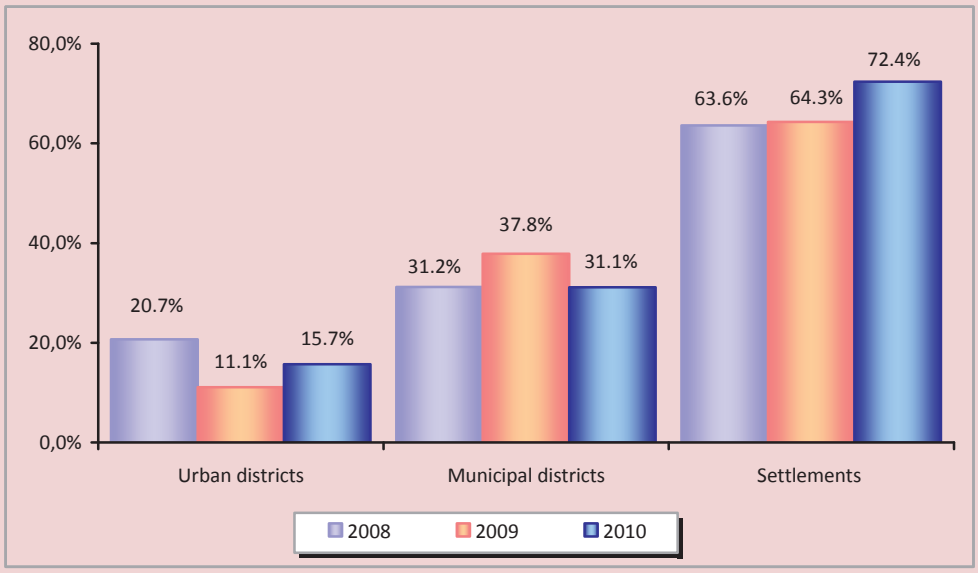
Increasing role of equalizing functions of intergovernmental dealings has a negative influence on the municipalities' interest in steady raising of tax potential, as well as rational and efficient expenditure of budgetary funds.

The tendency to diminish the possibilities of local governments to determine the spending priorities intensified after the Federal Law№ 63-FZ of April 26, 2007 "On Introducing Amendments to the Budget Code of the Russian Federation in the Part Concerned with the Budgetary Process and Agreeing Certain Acts of the Russian Federation" had come into force. The Law established additional (tighten) conditions for obtaining budgetary transfers (grants and subsidies) depending on the level of financial support provided by the municipality since 2008 (Article 136). In the Vologda Oblast the share of subsidies and grants in the amount of aggregate revenue in municipalities and settlements is more than 30% *(fig. 3)*. In accordance with the new terms of transfers, it means that most regional administrations don't have a right to establish and carry out expenditure commitments that are not mentioned in the Federal Law № 131. Accordingly, such municipalities couldn't get subventions. However, a number of delegated state authorities, which must be implemented at the expense of these transfers, should be funded without fail (e.g. federal benefits to veterans).

With regard to the structure of transfer payments to local budgets of the Vologda Oblast, there was the reduction of subsidies from 41.6% to 19.8% in the period from 2003 to 2010 *(tab. 3)*. However, transfers aimed at the implementation of own expenditure authorities (grants and subsidies) amounted to 8 billion rubles or 77.4% of local budgets' own revenues in 2010 (it is compared to 19% in 2003). The fulfillment of their own authorities by regional municipalities depends on the higher-level budgets. At the same time, during the studied period about 43-59% of funds were transferred in order to solve delegated authorities (subventions). Their total volume increased by 9 times in relation to 2003 and reached almost 10 billion rubles.

[2] Authors understand the sum of tax and non-tax revenues as own revenues of local budgets.

Figure 3. The share of intergovernmental transfers with the exception of subventions in the amount of aggregate revenues of various local budgets,%



Source: Authors' calculations according to the Treasury of the Russian Federation.

Table 3. The structure of intergovernmental transfers of local budgets in the Vologda Oblast in 2003 – 2010

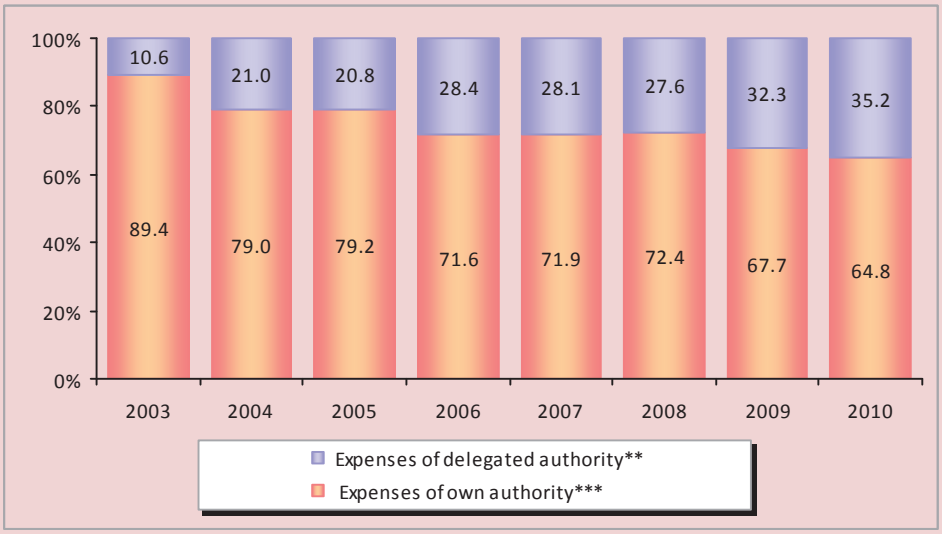
Indicator	2003		2004		2005		2006		2007		2008		2009		2010	
	bln. rub.	%	bln. rub.	%	bln. rub.	%	bln. rub.	%	bln. rub.	%	bln. rub.	%	bln. rub.	%	bln. rub.	%
Intergovernmental transfers, including:	2.5	100	4.6	100	6.4	100	10.3	100	13.8	100	14.9	100	13.9	100	18.1	100
grants	1.1	41.6	1.1	23.5	1.5	22.8	2.9	27.8	2.5	18.1	2.6	17.5	3.5	25.1	3.6	19.8
subsidies	0.3	10.4	0.7	15.6	1.6	24.9	2.0	19.8	3.9	28.4	4.7	31.7	2.8	20.4	4.2	23.5
subventions	1.1	42.8	2.7	58.5	3.2	50.1	5.3	51.1	6.8	49.1	7.3	48.7	7.4	52.9	9.9	54.5
The amount of grants and subsidies in the amount of own revenues	19.0		22.9		38.1		80.6		68.9		64.5		71.5		77.4	

Source: Authors' calculations according to the Treasury of the Russian Federation.

Touching upon the delegation of expenditure commitments, it should be noted that the federal government, declared the independence of local governments, did not create the system of control, power and property distribution which allowed these governmental bodies to carry out their functions. Municipalities were entrusted with the responsibility for solving of social and economic problems which fall within the competence of the Federation and the regions. The amount of delegated authority from the higher power levels increased annually in the period under our study *(fig. 4)*.

A significant increase in the expenses of delegated authority (they have been amounting to almost a third of aggregate expenditures since 2006) afflict the execution of municipalities' own expenditure commitments.

Figure 4. Correlation of own and delegated authorities in the municipalities' expenses in the Vologda Oblast, %



* Authors' calculations according to the Treasury of the Russian Federation.

** They are calculated as a share of subventions in the total expenses of local budgets.

*** They are calculated as a difference between total expenses of local budgets and expenses on the execution of own authorities.

Assessing the overall balance of local budgets, it is necessary to mean that it is formal. The revenue sources, which are assigned legislatively to the local level of the budgetary system, are insufficient to finance expenditure authority of local self-government. Deficiency of municipalities' own revenues in the financing of their aggregate expenditure authority increases annually *(fig. 5)*.

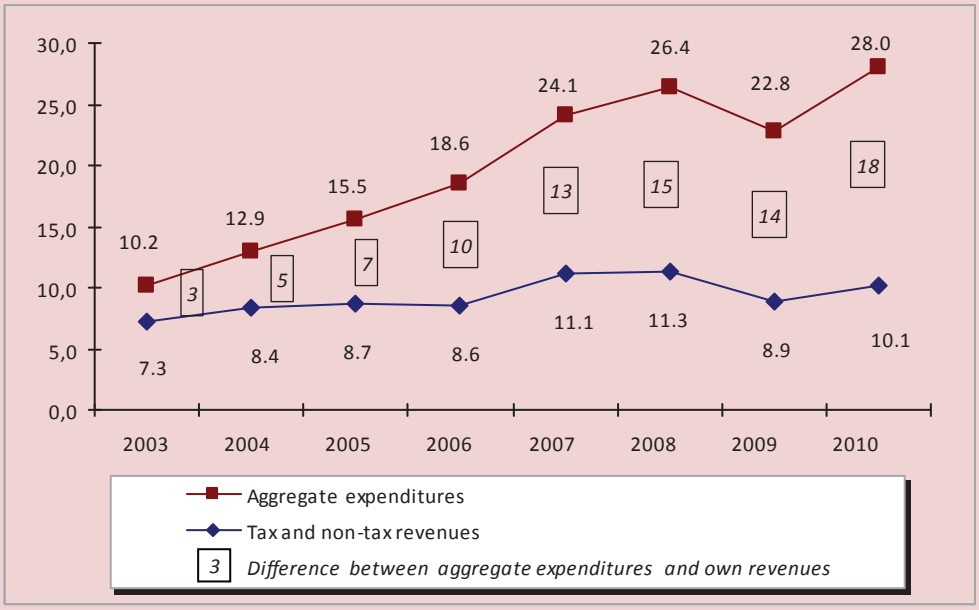
Inclusion of intergovernmental transfers in the structure of own revenues by the Budget Code creates the illusion of stable financial base in local budgets. However, most municipalities are subsidized. Only 6 territories from all 302 municipalities of the Vologda Oblast did not receive subsidies to equalize budget capacity in 2010 (Vologda, Cherepovets, Babaevo, Grjazovets Urban Settlement, Pogorelovskoe Rural Settlement of Totemsky District and Nelazskoe Rural Settlement of Cherepovets District). In such circumstances, the completeness of local government's own authority is dependent on the amount of financial support, rather than on the quality of management.

The imperfection of intergovernmental dealings is also reflected in the inability to ensure equal access for the population to budget services throughout the region. The municipal differentiation in terms of budget capacity indicates this fact. Thus, the gap between the most and the least prosperous municipalities in terms of their own revenues per a resident amounted to 3 – 7 times in the Vologda Oblast *(fig. 6)*.

The largest gap index was observed in 2006 (6.7 times) due to the beginning of the local government reform and restructuring of the local budgets' tax base.

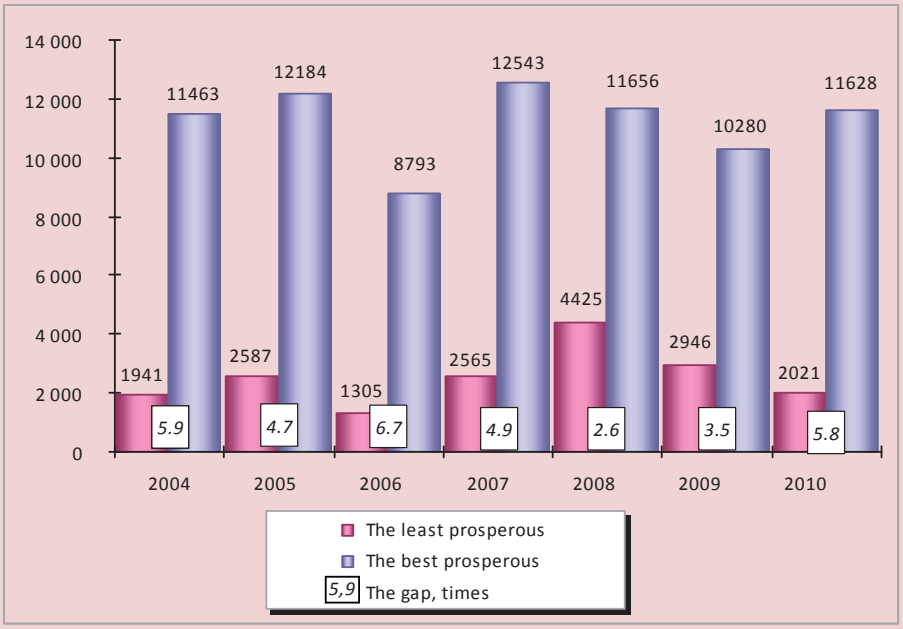
Thus, the intergovernmental reform hasn't reduced the dependence of local budgets on the financial support by the higher-level budgets. On the contrary, the revenue base of municipalities has been narrowed. Local governments are extremely limited to expand it. Formation mechanism of local budget revenues isn't stimulating sufficiently. It couldn't expand the volume of municipal services and improve their quality.

Figure 5. Dynamics of defrayal of aggregate expenses by own revenues of the municipalities' budgets of the Vologda Oblast*, bln. rub.



* Authors' calculations according to the Treasury of the Russian Federation.

Figure 6. Budget capacity by own revenues per a resident in the municipalities of the Vologda Oblast*, rub.



* Authors' calculations according to the Legal acts of local budgets by local self-government in the Vologda Oblast.

This situation doesn't contribute to the growth of life quality in most municipalities. It doesn't help to overcome parasitical attitude and promote economic development.

Directions for the improvement of intergovernmental dealings

Based on the foregoing, it is clear that the system of intergovernmental dealings requires further improvement. In our opinion, the key directions of this process should involve the solution of the problems, which include the following measures:

1. The inventory of remaining unfunded mandates and providing them with the sources of financing. We believe that this measure could allow us to define clear goals in the assignment of subventions and clarify the method of their size analysis. Based on this, we can limit legislatively the amount of government authority delegated to the municipal level.

2. The adjustment of the conditions to obtain additional intergovernmental transfers by the municipalities which were prescribed by the article of law 136 BC RF in 2008 (it is reasonable to raise the standards up to 25, 50 и 75%).

3. The improvement of intergovernmental transfers structure, providing:

- the transition from the transfers that have a narrow target orientation to the block wide-target transfers;
- the reduction of subsidies and subventions role in intergovernmental transfers.

4. The improvement of temporary cash shortage financing by:

- the transition to the treasury system of the local budget, based on the principle of cash unity;
- cash shortage forecasting;
- the development of an order to raise funds for temporary cash shortages during the execution of local budgets.

5. The development of inter-municipal cooperation forms, covering:

- pooling of resources in the form of co-financing expenditures;
- service agreement (decrease in price for a service within the scope of inter-municipal agreement);
- creation of joint administrations;
- the development of associative forms of inter-municipal cooperation;
- the formation of credit institutions, which are able to issue interest-free loans for several months.

6. Timely distribution and remittal of intergovernmental transfers by executive bodies of local authorities, regional and federal governments. In order to solve this problem, it's necessary to study the possibility to exclude the subsidies transferred to co-finance the programs for socio-economic development from the list of target transfers which should be returned in the case of undevelopment. It is also important to approve a monthly schedule of intergovernmental transfers to municipalities (with the exception of the transfers allocated on a competitive basis) in the appropriate application to the law of the regional budget.

As an application in prospect, *it is necessary to address the renunciation of the principle of budget capacity* leveling which is a base of intergovernmental policy now. The system of intergovernmental dealings in the Russian Federation evolved from a centralized type is searching for an optimal model. The most rational way in the present conditions in Russia is a gradual decentralization, based on joint decisions and coordinated actions of the governments.

It is possible to follow this way only by increase in economic growth and economic potential both of regions and municipalities when they could be more independent. In this regard, it is necessary to redistribute taxes for benefit of municipalities. At the same time, tax revenues dropping from the higher budgets will be indemnified by saving of the financial support to local self-government. Transfer taxes to the local level will stimulate the development of municipalities' tax base and the expansion

of priority development zones, while non-productive counter financial flows (from the municipality to the higher-level budgets, and then from the higher-level budgets to the municipality in the form of transfers) will be excluded. Disproportionate financial security of most prosperous municipalities in the existing intergovernmental system will be aligned by negative transfer.

Using the basic approach in the improvement of the system of intergovernmental dealings, it is reasonable to raise the question about the development of a new model, which represents not a "lifeline" for the backward municipal territories but a set of measures for their economic growth based on the principle of sufficient financial resources and real possibilities of their effective use.

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UDC 332.146.2(470.2)

Influence of investment subsystem on the region's socio-economic development

The article contains the analysis of socio-economic development of the regions by a ranking method. The author has proved the influence of the investment processes on the level of the region development and has revealed the relationship between the specific allocation of the investment subsystem resources and the level of the region development. The methods of statistical analysis are used in this study, and the information basis of the study is statistical materials of the Federal State Statistics Service.

Region, investment subsystem, socio-economic development, financing of fixed capital, investment resources.

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Stability and economic growth in the regional socio-economic systems are largely predetermined by the scale of investment as a factor of economic dynamics, its formation being carried out in the course of social reproduction. In the reproduction system the investment has an important role in renewing and increasing of production resources, and therefore in providing some economic growth of the region. If you think of social reproduction as a system of production, distribution, exchange and consumption, the investment mainly relates to the first link - production, and we can say that it is the material basis of its development. In the system of relationship of the expanded reproduction the investments perform the most important structure-forming function. The future structure of the economy depends on what economic sectors are invested to be developed.

The growth of regional economy on a new basis means restoring the proportions between the increase in labor productivity and the growth of gross regional product, creating a new economic structure and improving its energy efficiency and providing the conditions for business development and investment attraction. The orientation of socio-economic transformations in the country as a whole and in its individual regions largely depends on the successful development of the investment process.

Consequently, the work of the investment subsystem affects every component of the regional socio-economic system without exception.

To identify the specific impact of the investment subsystem on the region's development the present study analyzes a group of the regions of the North-West Federal District (NWFD). The level of the region's socio-economic development is determined on the basis of one of the blocks of region development rating methodology created by the group promoting the channel to the regions of the Directorate for developing the Broadcasting Company "Petersburg". This block is called "the calculation of the starting rating of the regions".

The rating of the region development is a list in which the regions are sorted by the level of their development: the most developed region ranks first, and in the least developed one is at the last place [1].

To calculate the rating the ranking method is used. At the first step the region is assigned to the place by 15 statistical indicators related to three aspects of development: social sphere, economy, social and economic infrastructure *(tab. 1)*.

According to the method the region with the best indicator ranks first, the region with the worst indicator ranks last. Then the places are summed by all 15 indicators. The final place of the region is determined according

Table 1. Assessment of the socio-economic development of the regions and their characteristics

Indicator	Characteristics and the calculation features
Social sphere	
1. Life expectancy at birth	The most probable age which will be attained by the child born in this region in the given year.
2. The infant mortality rate	The number of children deaths at the age under one year old per 1000 newborns.
3. Morbidity	The number of patients with newly established diagnosis in life, detected during the year when applying to a health care institution or when routine inspecting per 1000 people
4. Crime rate	The number of murders and the attempts on one's life per 1000 people.
5. Migration balance	The difference between the number of people who came to the region and the number of people who left the region. It characterizes the region's attractiveness for the citizens
Economy development	
6. Gross regional product per capita	It characterizes the total volume of goods and services produced in the region
7. Investments in fixed capital per capita	It determines the future potential of the economy development.
8. The growth of energy consumption in the region	It shows the development of energy-intensive industry in the region and the increase in the welfare of citizens.
9. The volume of wage debts	The indicator is adjusted to the living wage in the region
10. The nominal income per capita	The indicator is adjusted to the living wage in the region
11. The retail trade turnover and the volume of paid services	It is calculated per capita.
Social and economic infrastructure	
12. Average construction growth rate in the region	It reflects the further development of the territory
13. Communication revenues	The indicator is revenue of all telecom operators obtained for the volume of postal and telecommunication services sold to the consumers, per capita.
14. Density of highways	The length of hard-surface roads per 1000 square km in the region. It characterizes the degree of development of the region.
15. Provision of the population with social infrastructure facilities	It is calculated on the basis of three indicators.
15.1. The number of sport grounds and gyms	It is calculated per 1000 people.
15.2. The number of kindergartens and schools.	It is calculated per 1000 people.
15.3. The number of students studied at the state higher educational establishments.	It is calculated per 1000 people.

to the amount of places of the region by each indicator: the smaller the amount of seats, the higher the region's place in the starting rating. If two or more regions receive the same amount of places, they are re-ranked according to the economy development: one of them that has received a higher place in the economy development gets a higher place.

The indicator of provision of the population with social and economic infrastructure facilities is calculated in the similar way: the regions are ranked by each of the three indicators, the amount of places of the region by all three indicators is calculated for each region. Then regions are sorted based on the value of this amount of places: the region with the best provision gets the first place, with the worst - the last one.

A distinctive feature of this technique in our study is determining the independent ratings by each of these spheres, as well as determining the final place of the region based on the private ratings of each sphere. The method is similar to the starting rating method of the region development. From the author's point of view, this approach makes it possible to smooth the shortcomings of the integral indicator to some extent, not taking into account the weight importance of individual quantities that characterize the level of development of various spheres.

The addition to the used method is also adjusting the indicator of GRP per capita by the coefficient of the level of purchasing power, replacing the indicator of sports grounds and gyms per 1000 people figure by the indicator of provision of the population with outpatient clinics in order to take account into the health subsystem development, as well as the exclusion of the energy consumption indicator due to its inclusion in the analysis of the northern regions which are originally characterized by high energy consumption.

The rank assessment of the distribution of regions by the level of socio-economic development is presented in *table 2*.

According to the results of the calculations performed, the region under the study can be roughly divided into four groups: strong regions (with leading positions in all areas), poor regions (with the weak development in all three areas), unevenly developing regions (with the development asymmetry of the spheres) and medium regions with deteriorating position (their level of socio-economic development is steadily decreasing).

The leadership among the North-West regions belongs to the northern capital - St. Petersburg. This is the only area referred to the group of strong regions. It has a high level in all three areas.

Table 2. The rank score of the level of socio-economic development of the regions

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
The Republic of Karelia	8	6	7	10	11	8	7	9	9	10	10
The Komi Republic	3	3	5	5	5	2	3	2	2	4	3
The Arkhangelsk Oblast	4	8	3	8	5	5	10	8	3	8	7
Nenets Autonomous Area	10	10	3	10	4	8	9	10	11	9	9
The Vologda Oblast	8	7	6	3	2	4	2	5	8	6	4
The Kaliningrad Oblast	6	5	8	6	9	7	6	2	5	3	6
The Leningrad Oblast	6	8	8	4	5	6	4	4	5	2	5
The Murmansk Oblast	2	2	2	2	3	2	5	7	3	5	2
The Novgorod Oblast	4	3	11	7	8	10	8	5	7	7	8
The Pskov Oblast	11	11	10	9	10	11	11	11	9	11	11
St. Petersburg	1	1	1	1	1	1	1	1	1	1	1

It ranks second only in the field of economic development, interior to the Nenets Autonomous Okrug *(tab. 3)*.

The structure of weak regions includes the Republic of Karelia and the Pskov Oblast. However, the distinguishing feature of the Pskov Oblast is rather good place to develop the social sphere - the sixth place. The development of this sector in the depressed region is caused by the previously established priorities in the allocation, first of all, the help for social purposes from the center, due to it even the poor developed regions have a high provision *(tab. 4)*.

The group - medium regions with the deteriorating position - is composed of two regions: the Murmansk Oblast and the Vologda Oblast. These regions show the average level of development during the period under review by the social and the economic spheres. In the recent times the situation of these regions is deteriorating steadily.

The fourth group - unevenly developing regions – is the largest group by its composition and it integrates the regions with the asymmetry of social and economic development. It includes three northern regions and three non-northern regions: the Arkhangelsk Oblast, Nenets Autonomous Area, the Komi Republic, the Kaliningrad Oblast, the Leningrad Oblast and the Novgorod Oblast.

At the same time the northern regions of this group take high rank for the economy development, and this is explained by the presence of a large-scale production of oil and gas producing industry, and the social development in these regions is very far behind and did not correspond to its economic potential. On the contrary, the non-northern regions are characterized by poor economic development and a strong enough social sphere.

Table 3. The rank score of the regions for the economy development

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
The Republic of Karelia	5	5	5	7	9	9	10	10	11	11	9
The Komi Republic	4	3	2	3	3	1	3	3	3	3	3
The Arkhangelsk Oblast	8	6	6	7	7	4	7	5	4	5	5
Nenets Autonomous Area	1	1	1	2	1	3	1	2	1	1	1
The Vologda Oblast	6	6	7	5	3	4	5	7	9	9	6
The Kaliningrad Oblast	7	6	8	9	8	8	8	5	7	8	8
The Leningrad Oblast	10	10	9	6	6	6	4	4	5	4	7
The Murmansk Oblast	2	2	4	4	5	7	6	8	6	6	4
The Novgorod Oblast	9	9	10	10	10	10	9	9	8	7	10
The Pskov Oblast	11	11	11	11	11	11	11	11	10	10	11
St. Petersburg	3	4	3	1	2	2	1	1	2	2	2

Table 4. The rank score of the regions for the development of social sphere

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
The Republic of Karelia	10	10	6	8	11	5	5	4	6	7	8
The Komi Republic	6	6	11	10	10	9	8	9	10	11	10
The Arkhangelsk Oblast	8	7	6	4	5	9	10	10	8	7	9
Nenets Autonomous Area	11	11	4	11	4	8	11	10	11	10	11
The Vologda Oblast	6	9	10	7	5	6	4	5	4	5	5
The Kaliningrad Oblast	3	3	6	4	8	4	3	3	2	3	3
The Leningrad Oblast	2	2	2	2	2	2	2	2	3	2	2
The Murmansk Oblast	4	5	3	3	3	3	5	7	7	4	4
The Novgorod Oblast	5	3	9	8	5	7	7	7	8	9	6
The Pskov Oblast	9	7	4	6	9	9	9	5	5	5	6
St. Petersburg	1	1	1	1	1	1	1	1	1	1	1

The Leningrad Oblast in the sphere of social and economic infrastructure ranks the 10th place, but it can be explained by the fact that it is situated around the federal city and it grows due to the agglomeration effect *(tab. 5)*.

The differentiation of the regions by the level of their socio-economic development, the features and the uneven development of the studied spheres in the regions cause an objective need for revealing the specifics of the investment processes in the regions.

The indicator of investment activity in the regions is an indicator of the investment share in the GRP. High activity of attracting the investment resources is is typical of the Arkhangelsk Oblast (including its member Nenets Autonomous Area), the Republic of Komi, the Leningrad Oblast and the Kaliningrad Oblast.

High financial provision of the investment process in the first three subjects of the Federation explains their leading position in the field of economic development. The high investment resources of the Leningrad Oblast and the Kaliningrad Oblast are reflected in ensuring of high places for the development of social sphere *(tab. 6)*.

The Novgorod Oblast referring to the group of unevenly developing regions has a developed sphere of social and economic infrastructure (it ranks 3rd). The active development of this sector is connected with the GRP investment share having increased since 2004.

The minimum value of the indicator of GRP investment share is typical of the Murmansk Oblast, its economic development has fallen from 2nd place in 2000 to 7th in 2005, and in subsequent years it did not rise above the 6th place till the crisis year.

Table 5. The rank score of the regions for the development of social and economic infrastructure

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
The Republic of Karelia	5	3	9	9	10	8	5	8	5	4	8
The Komi Republic	5	4	4	4	4	2	2	2	2	2	2
The Arkhangelsk Oblast	2	8	4	10	5	4	8	5	5	8	6
Nenets Autonomous Area	11	10	11	11	11	11	11	11	11	10	11
The Vologda Oblast	8	5	2	3	1	5	3	6	7	4	5
The Kaliningrad Oblast	9	5	7	6	7	7	5	6	9	4	7
The Leningrad Oblast	7	9	10	8	9	10	8	10	10	8	10
The Murmansk Oblast	3	5	2	4	3	2	4	4	4	7	4
The Novgorod Oblast	4	1	6	2	5	6	5	2	3	3	3
The Pskov Oblast	10	10	7	6	8	9	10	8	7	10	9
St. Petersburg	1	1	1	1	1	1	1	1	1	1	1

Table 6. The specific weight of fixed capital investment in GRP, %

	2000	2005	2006	2007	2008	2009	Average
The RF	20,3	20,0	21,0	24,0	25,5	24,7	21,8
The Republic of Karelia	22,7	19,8	21,5	18,3	19,4	17,6	21,3
The Komi Republic	28,8	29,4	34,0	26,1	27,8	36,0	28,5
The Arkhangelsk Oblast	16,9	28,7	40,9	48,6	44,1	20,4	30,1
including Nenets Autonomous Area	32,1	50,2	74,5	93,2	82,9	26,4	61,4
The Vologda Oblast	12,4	31,3	32,7	32,6	24,2	26,1	23,6
The Kaliningrad Oblast	19,6	36,6	31,6	32,1	36,9	31,5	28,4
The Leningrad Oblast	34,4	40,3	48,0	40,9	42,0	45,5	40,6
The Murmansk Oblast	13,0	15,1	15,5	14,1	21,1	20,5	16,1
The Novgorod Oblast	22,7	21,9	25,3	27,6	28,3	31,5	24,4
The Pskov Oblast	15,1	13,7	14,8	22,2	22,3	17,3	16,8
St. Petersburg	19,1	23,5	23,5	27,1	25,8	22,0	23,4

Source: It was calculated by the author on the basis of [4].

In the Vologda Oblast the GRP investment share is being reduced, and this causes, as we have already noted, the deterioration of the socio-economic situation of the region in recent years.

Then the Pskov Oblast and the Republic of Karelia rank the next places. The low provision with the investment resources justifies their inclusion in the group of weak regions.

For the provision with the investment resources St. Petersburg has the average indicator – 23.4%, while it belongs to the strongest region, first of all, due to its special status – the "northern capital".

In most regions of the NWFD the predominant sources of investment activity are loans of other organizations and means of superior organizations *(tab. 7)*. In some regions they considerably exceed in the aggregate not only alternative external sources of funding, but also their own resources.

A striking example of this fact is the regions leading for attracting foreign investment funds – the Arkhangelsk Oblast and Nenets Autonomous Area. The fact that the funds redistributed within the non-financial sector (loans of other enterprises (organizations) and the means of superior organizations) are prevalent as a main source of capital funds explains the unevenness of development of social and economic spheres in these regions (external investors strictly aim at economic interests, social processes are ignored). The close dependence of the activity of the investment processes on the funds of superior organizations is typical of almost all northern regions (the exception is the Republic of Karelia).

In the regions of NWFD the market sources are not developed enough not only at the initial period of market reforming, but also in the study period. This is especially true for the issues of shares and bonds. The passivity of the NWFD regions in the process of fund raising through the issuance of securities (except for St. Petersburg) probably can be explained by the lack of proper awareness about the possibilities of the stock market both for issuers (companies) and for potential investors, as well as by the underdeveloped infrastructure of the stock market in the regions. An indirect confirmation of the latter assumption is a leadership in raising the resources through issuance of St. Petersburg and the Leningrad Oblast adjacent to it.

Therefore, among the market sources the main share is loans. At the same time the increase in the share of lending, characteristic

Table 7. The specific weight of other* sources in the structure of financing the fixed capital, % (calculated by the author on the basis of [4])

	2000**	2005	2006	2007	2008	2009
The Russian Federation	7,2	16,5	18,5	18,4	20	26,1
The NWFD	9,5	27,9	36,6	31,7	30,3	33,6
The Republic of Karelia	2,7	18,6	36,1	16,6	16,5	29
The Komi Republic	6,7	54,7	47,1	24,7	28,1	48,2
The Arkhangelsk Oblast	18,0	55,6	70,8	71,1	62,5	45,2
including Nenets Autonomous Area	56,7	58	76,8	82,8	73,8	59
The Vologda Oblast	4,0	43,6	49,7	44,1	30,9	35,7
The Kaliningrad Oblast	2,1	13,2	25,6	23,5	26,9	51,9
The Leningrad Oblast	19,6	29,5	44,8	43,6	46,1	53,4
The Murmansk Oblast	4,2	6,1	27,2	11,3	29,9	21,8
The Novgorod Oblast	0,6	27,6	24,4	25,1	29	34
The Pskov Oblast	3,1	9,6	8,7	8,1	8	11,1
St. Petersburg	4,9	7,5	8,4	10,5	11,0	12,3

* Other sources include loans of other organizations and means of superior organizations
** There is no information on the means of superior organizations for 2000.

of Russia, has a slow rate in the NWFD. The Republic of Karelia, the Kaliningrad Oblast and St. Petersburg attract credit resources in the investment sphere the most actively. The Pskov Oblast becomes more active in recent years. The last three of them have a special status: Saint-Petersburg is a "northern capital", the Kaliningrad Oblast is a special economic zone, the Pskov Oblast is a depressive region [2].

In general the federal district is characterized by strengthening the role of budget financing. St. Petersburg (the northern capital) and the Pskov Oblast (depressive area) have the highest proportion of this source. Moreover, in Karelia the budget funds of the Federation subject is almost half of the budgetary resources. The presence of a significant amount of budget funds in the replenishment of investment of the Pskov Oblast also determines rather good level of development of the social sector *(tab. 8)*.

The budget resources and the market mechanisms actively manifest themselves in the Kaliningrad Oblast which belongs to the unevenly developing regions and is characterized by a well-developed social sphere. The Novgorod Oblast belonging to the group of irregularly growing regions has a little share of funds raised, and this fact is reflected in the tenth position by the economy.

Assessing in general the resource structure established in the regions and invested in social production, we can say that the companies are funded primarily from their own funds and the funds of related companies. This is above all, true of the northern regions (for example, the Republic of Komi, the Murmansk Oblast and the Vologda Oblast) where the bulk of revenue (90%) is formed by large town-forming enterprises that are a part of holding, their management companies are often registered outside the region. The latter, in turn, are not interested in investing in the regional development. Accordingly, the main financial resources, earned in the region leave it. This fact explains the belonging of the Murmansk Oblast and the Vologda Oblast to the medium regions with the deteriorating socio-economic development and the uneven development of social and economic spheres in the Komi Republic.

Thus, the study of trends in socio-economic development of the NWFD and the specific allocation of the investment subsystem indicate that the strong economy does not always provide a proper social development, and vice versa, the developed social sphere does not always imply a high level of economic development. In other words, the specificity and the level of socio-economic development of the region are determined by the peculiarities and the intensity of current investment processes.

Table 8. The specific weight of budget financing in the structure of financing investment in fixed capital, % [3]

	2000	2005	2006	2007	2008	2009
The Russian Federation	22,0	20,7	20,2	21,5	20,9	21,8
The North-West FD	15,5	15,0	15,7	20,9	21,3	23,8
The Republic of Karelia	17,0	14,7	18,1	18,2	20,8	24
The Komi Republic	6,8	5,9	5,5	7,3	6,7	4,6
The Arkhangelsk Oblast	12,7	6,8	4,3	6,3	6,9	16,1
including Nenets Autonomous Area	3,4	3,7	1,8	2,1	2,5	7,2
The Vologda Oblast	20	6,3	5	6,3	11,5	10,1
The Kaliningrad Oblast	13,9	18,3	21,4	15,3	21,2	29,9
The Leningrad Oblast	12,5	7,3	12,9	7,2	12,4	17,1
The Murmansk Oblast	11,6	16,8	15,1	19,7	18,2	19,2
The Novgorod Oblast	7,6	10,6	6,3	7,9	12,2	21
The Pskov Oblast	39,6	21,1	19,2	26	21	28,8
St. Petersburg	22	28,5	32,1	43	39	39,8

The solution of existing problem consists in general in settlement of relations between public authorities and business-structures. To attract big business to solving the problems of the region where they work is really possible only if the appropriate legislation acts are adopted (the law on "holding companies", legitimizing social responsibility, etc.). This is, of course, the level of the Federation.

To solve the regional economic and social problems the local authorities should focus first of all on the internal reserves for increasing the investment resources of the region. Such internal reserves are population's savings. In the near-term outlook this is the savings that can become a fundamental base for meeting the needs for increase in the investment resources, and as a consequence, for solving the major social and economic problems of the region.

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UDC 37.014.543(470.12)

The practice of national education financing in the second half of the XIX century – the beginning of the XX century
(based on the materials of the Vologda province)

The article deals with the practice of the financing of public education in the Vologda province in the second half of the XIX century – the beginning of the XX century. The article, basing on the historical-comparative approach compares the objects, forms, types and sources of the financing of primary education. The study of the problem is based on the analysis of the archival materials and published record management and statistical documents.

The Treasury assets, zemstvo (territorial) levy, levy from rural communities, donations from private individuals, churches, monasteries; peasant levy, provincial and district zemstvo Assemblies (zemskoye sobranye) and Councils (zemskaya Uprava).

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The appearance in 2011 in Russia of number of projects and programs aimed at modernizing the education system, such as the project "Modernization of the general education" aimed at increasing teachers' salaries, "Modernization of the regional systems of general education", Federal Target Program for the Development of Education in 2011 – 2015 years, and the priority national project "Education" for 2011 – 2013 suggest that the current government is concerned about the state of education.

There is an intensive search for the most appropriate to modern conditions for forms and methods of education and upbringing in Russian society. Comprehension of the most valuable historical experience of financing the system of primary education in Russia in the second half of the XIX century – the beginning of the XX century (on materials of the Vologda Guberniya (further – Province) makes it possible to compare and analyze objects, shapes, types and sources of primary education financing.

The study of the problem of financing public education in the Vologda province is based on such sources as legislative acts of central bodies of state authority, clerical materials of the public and district institutions, a number of statistical sources, and unpublished archival materials of funds "Vologda Province Zemstvo" and "Vologda diocesan statements" of the State archive of the Vologda region.

In the second half of the XIX century – the beginning of the XX century the state took an active part in the education of the population and considered appropriate to encourage popular schooling.

In 1860 in the Vologda province four main types of schools worked: "School lite-racy", parish, zemstvo schools, and ministerial two-class school [19, p. 5]. The reform of 1864 gave a certain impetus to the development of primary education. In large part this was due to the activities of zemstvo – local authorities, onto which the government shifted the care about the financial situation of schools and spreading of literacy among peasant children (Law "On the zemstvo institutions" from January 1, 1864) [12, p. 12].

Zemstvo begins the work with the developing and maintainance those rural schools (mostly parochial),in work of which public was interested, and depending on the funds that were collected from peasants for the maintenance of schools and colleges, which was in the middle of the XIX Century 6 cents per person, amounting to 987 rubles. Zemstvo schools owed its appearance to local self-government, mainly existed at their expense, with the direct assistance the state and rural communities. Funding sources zemstvo schools were: the Treasury assets, zemstvo (territorial) levy, levy from rural communities, donations from private individuals, churches, monasteries, fees for teaching (peasant levy) and other sources [12, p. 12].

Due to the fact that according to the decision of the State Council on February 11, 1867 special school levy from state peasants had been stopped, and since 1871 the zemstvo itself was obliged to take part in ensuring the maintenance schools (Ministry of Interior circular of 24 November 1867 and December 21, 1868 number 21), then the latter primarily had to take care of the maintenance of already existing rural schools. Expenditure of zemstvo on primary education were classified as non-binding, and therefore the zemstvo at first gave allowances to rural with civil society, which included school and did not have a specific purpose, were used to issue "awards" that is, irregular additional payments to the salary for teachers [9, p. 256].

Gradually, as the increase of the activity of the district and provincial zemstvo, promotion of rural societies, collecting from the peasants for the maintenance of schools and colleges (6 cents per person), the number of schools began to increase, which affected the number of children attending school. The number of literates in the counties was about one person per 100 illiterates [3, file 85, list 5-11].

Data on the increase in the number of students in the Vologda province for five decades are presented in *table 1.*

As shown in table, the number of students is constantly increasing. At the same time for the content of elementary schools in the cities urban society, rural schools and schools maintained by means of district and provincial zemstvo, partly at the expense of the Ministry of Education and rural communities were responsible. A small number of girls enrolled due to the fact that the young peasant woman engaged to a greater degree of household, education of the younger children and because of the hardships of daily life have not been able to attend school.

In 1871, the process of opening of zemstvo schools was observed in the Vologda province. The average amount for the maintenance of a primary school was 526 rub. per year, the consumable part of which consisted of salaries: a catechist – 75 rub.; a teacher of Science – 350 rub.; crafts teacher – 50 rub., costs "to class economic needs" – 30 rub., expenses "for heating and lighting" – 21 rub. Part of the sum, namely, 226 rub. was released each year by the Ministry of Education, other resources; namely, 300 rub. were based on investments by zemstvo and rural societies [14, p.180]. These amounts show so high the social and material teacher's level was, because 345 rub. in the year were enough for a teacher to food, shoes, clothing, travel, and support for families [17, p. 16]; in addition zemstvo took part in the lives of teachers by providing them with flats and apartment money (about 67 rubles per year), and rural communities by incurring economic expenses [4].

Table 1. The growing number of pupils in primary schools of Vologda for the period from 1865 to 1913

Year of study	Number of students for the new academic years		
	Boys	Girls	Total
1865	7546	1111	8657
1874	8295	1161	9456
1875	8756	1143	9899
1876	8985	1341	10326
1877	9410	1443	10853
1878	9455	1646	11101
1879	10034	1750	11784
1880	10257	1906	12163
1881	10564	2077	12641
1882	10971	2095	13066
1883	11739	2139	13878
1903	15040	4196	19236
1904	13312	4070	17382
1905	16349	5258	21607
1907	17298	5496	22794
1909	20939	6745	27684
1910	23754	8423	32177
1911	-	-	35943
1912	-	-	40866
1913	31396	12667	44063

Compiled by: The memorial book of the Vologda region in 1865 – 1866 years. Vologda, 1866. P. 102; Primary education in the Vologda province according to the 1898 – 1899. T. 2. Yaroslavl, Vologda, 1902. Pp. 7, 81, 90;
Losev S. On the lower schools in the province of Vologda in 1910. Arkhangelsk, 1911. P. 74; SAVO (State Archive of the Vologda Oblast). F. 34. File 1071. List 7; Journals of the Vologda province zemstvo assembly. Reports of the council of public education in 1870. Vologda. Pp. 173-174; Current school statistics of the Vologda province zemstvo. Vologda, 1904. Issue 1. Pp. 4-24; 1905. P. 7; 1906. P. 4; 1908. P. 6; 1910. P. 6; 1911. P. 6; 1912. P. 5; 1913. P. 6; 1914. P. 6; Brief statistical outline of teaching and educational affairs for the 1892. The memorial book of the Vologda region in 1893 – 1894. Pp. 137-140.

This system lasted until the mid-1890s, when the zemstvo schools were maintained by the joint means of rural societies and zemstvo, and in direct state aid. During the 1890s, zemstvo had to incur all the costs itself, with the support of the state [9, p. 370]. The Vologda province took 22nd place (19%) of 34 provinces on the degree of involvement of the Treasury in the maintenance of primary public schools among other provinces and regions [12, p. 237].

Caring about the needs of zemstvo schools distributed between local authorities: district and provincial zemstvo assemblies and boards. In general, the zemstvo schools are in a better position in contrast to other types of schools that finds confirmation in the records of county zemstvo: higher wages of teachers, more diverse educational and ancillary benefits, more adapted premises for the educational process, etc. By the regulations of 1874 trustees had been eliminated from participation in the Board of the zemstvo schools that were permitted by the Regulations of 1864. In fact, heads of public school became the inspectors of public schools who had been granted the right to appoint and dismiss teachers [2, p. 183].

Since 1871, expenditures for maintenance of primary schools were budgeted annually the Vologda provincial zemstvo, which was the main source of taxing real estate: land, houses, industrial and trade institutions. The sources of zemstvo income also were benefits from the Treasury on the development of primary education, "zachety" (free cash amounts of zemstvo that do not have a specific purpose), the levies from the documents on the right of trade and crafts [5].

For nine years (1873 – 1881) the percentage allocated to primary education in total costs of provincial zemstvo was 5.4. From 1881 to 1897 the district council allocated only 1.7% for primary education that is explained by the fact of the support of secondary schools with the provincial importance and caring about the primary education was rested with the district zemstvo. In 1897 the position of provincial zemstvo changed somewhat and February 27, 1897, it excited the petition to adopt the means of the treasury on some of the costs to the vacated amounts were used to the strengthening of public education. In 1899, a "special capital" for the needs of public education in the province through contributions of per cents from the provincial reserve fund was established [13, p. 254].

Allocation of responsibilities for the maintenance of primary schools between rural communities and county zemstvo had happened to the 70s of the XIX century, since that time the peasants began to build schools, develop or hire the room for them, keep guards; and such duties as supplying schools manuals and guides, keeping of teaching staff, setting up of school libraries were fixed for zemstvo. But with the 1880 – 1890's establishments of zemstvo gradually forced to take these functions for themselves. The process of increasing the district zemstvo's outlays in the second half of the XIX century on primary education is presented in *table 3*.

The analysis of these district zemstvo's costs on primary education in 1871 – 1898, shows, that it was the process of increasing the outlays of district zemstvo on primary education in the second half of XIX century. Thus, for the 27-year period (1871 – 1898) expenses of district zemstvo on public education has increased 7.3 times, while the total cost increased only by 4.6 times during this period.

Table 2. The costs of the Vologda Province Zemstvo on primary education (1873 – 1897)

Years	Costs in all, rub.	Including costs on primary education, rub.	The share of costs on primary education in general, %
1873	35300	3500	9,9
1875	73676	2900	3,9
1880	109323	4650	4,3
1885	112720	2980	2,6
1890	124976	1380	1,1
1895	165301	2680	1,6
1897	326702	3230	1,0
The table has been compiled by: Primary Education in Vologda province according to the data for 1898 – 1899 years. T. 2. Yaroslavl, Vologda, 1902. P. 63.			

Table 3. The costs of the district Zemstvo on primary education (1871 – 1910)

Years	Costs in all (In rubles)	Including costs on primary education	The share of costson primary education in general (in%)
1873	364309	42600	11.7
1875	480309	69756	14.5
1880	666654	90512	13.6
1885	802555	117645	14.7
1890	840497	135148	16.1
1895	1181135	127612	10.8
1905	-	259563	-
1910	-	592765	-
The table has been compiled by: Primary education in Vologda province according to the data for 1898 – 1899 years. Vol 2. Yaroslavl, Vologda, 1902. P. 77, Appendix; Current school statistics of the Vologda Province Zemstvo. Issue 3. Vologda, 1906. P. 19; Issue 7. 1909; Issue 8. 1910. P. 100.			

In the 90 years of the nineteenth century, Vologda local boards attempted to reduce the outlay on schools by the way of transfer them to the Diocesan school Board. For example, in 1885, 6 schools ('Uchilishe') and 21 parochial school under the resolution of zemstvo assembly in Velsky, Vologda, Gryazovetsky, Kadnikovsky, Nikolsky, Solvychegodsky, Totemsky, Ustsysolsky, Ustyugsky, Yarensky districts were transferred to the Diocesan control [3, file 453, list 58.]. This action was prompted by the desire of zemstvo institutions to reduce the cost on maintenance of schools and colleges as well as zemstvo was not interested in the development of zemstvo school and did not try to compete with the diocesan schools. But the situation had changed soon, that affected the amounts allocated by zemstvo establishments for the maintenance of zemstvo schools [12, p. 77]. The data on the amounts which were allocated by district zemstvo on keeping of zemstvo schools, are presented in *table 4*.

The increase zemstvo budget for the maintenance of schools in 1897 in Vologda, and Gryazovetsky, Kadnikovsky districts was due to the establishment of new zemstvo schools. Increase of the budget in Ustsysolsky district had been because of means were transfered to the construction of school buildings, the reduction in 1891 in Solvychegodsky and Ustyugsky districts had been because of transfers zemstvo schools to ecclesiastical control. Sharp lowering of spending on primary education in Nikolsky district in 1895 was due to the fact that the zemstvo budget was approved by the Administration, as zemstvo assemblies in this district were not conducted.

Thus, keeping primary schools the district and provincial zemstvo transfered funds to the zemstvo schools, funded parish schools and literacy schools, supported ministerial colleges (schools) and private schools. As a result, for the period from 1905 to 1915 the total number of schools and colleges in Vologda province has increased by 564 schools. Thus, the development of primary education in Vologda province was accompanied by improving the material conditions of zemstvo schools, the main sources of income for their existence were the local authorities and the state. Reorganization being carried out in school affairs ought to unite center and regions into integral cultural space. The historical experience of financing primary education deserve consideration at the stage of updating the current system of education, and it should apply, because all powers of local self-government, non-repayable grants, loans, the Treasury and public initiative were directed to the development of public education in the village.

Table 4. Amounts transferred by district zemstvo for the maintenance of the zemstvo schools (1888 – 1898)

Years	Districts										
	Vologda	Velskiy	Gryazovetsky	Kadnikodsky	Nikolsky	Solvuchegodsky	Totemsky	Ust-Sysolsky	Ustyugsky	Yarensky	Total
1888	12801	-	6572	9106	-	12337	11356	9956	15855	-	77983
1890	10817	-	6458	8522	-	10925	11113	13494	11791	-	73120
1895	10192	-	8688	11399	16480	2500	13247	14484	4588	-	81578
1897	12997	-	15731	13891	16061	4980	13245	18243	5163	-	100311
1898	17206	11471	15780	19425	27095	5170	13275	17636	9230	-	136288

The table has been compiled by: Journals of the Vologda district Zemstvo Assembly emergency sessions. Vologda, 1907. P. 5; SAVO. Fund 34. Inventory 1. File 453. List 58.

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DISCUSSION TRIBUNE

UDC 330.342.14(470)

The victory of capitalism in Russia: history and myths

Interpretation of development of Soviet society in the context of the capitalization with appropriate social and class changes (the emergence of new classes) is suggested in the article. Postsovetsky period, according to the authors, is associated with the loss of the accumulated capital of our country or decapitalization.

Capitalism, Soviet Union, Russia, capitalization, classes, decapitalization.

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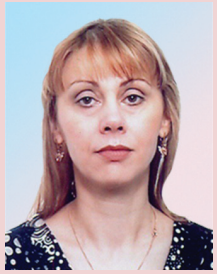

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The question of Russia's development strategy is one of the most discussed in modern society. In the article by M. Selin, which was published in 2011 in this journal [1], correct ideas of modernizing the public consciousness associated with the change in world-outlook in point of economic dominants in Russia has been expressed. In this connection we would like to offer readers to reflect on a new conception of historical development of Russia in the twentieth century – the beginning of the XXI century.

The introduction of mythological representations of the past in social awareness (oftener – consciously) is one of the fundamental features of political activity. One of such modern myths is the notion of stages in the evolution of capitalism in Russia XX – early XXI century. There is shared opinion in education and mass media propaganda that until 1917 Russia was capitalist (albeit with vestiges of feudalism), from 1917 to 1991 capitalism was destroyed and socialism was build, and since 1991 capitalistic trend has been revived.

Politicians and then propaganda arrange pros and cons of this historical period depending on the degree of "membership of right wing or left wing". A part of them "likes" the first and the third "capitalist" segments; another part "likes" the second "socialist" period.

Was capitalism in Russia before 1917?

It was. But the conclusion on its predominance is uncertain. Most of the population (over 80%) lived in countryside, led mostly subsistence farming, worked by the family (so-called family-labor cooperation), almost all means of production were own manufacturing. Ate mainly own manufacture products, relations with the market were weak. In general, traditional peasant life went on with all its routine in the village.

Of course, industry and banking capital were developing, but they were not the economic dominant. In the national income of the Russian Empire the industrial part of the economy in 1913, occupied 29% (data of A. Weinstein) [2]. General, in Russia agrarian society and economy with low capital dominated. The social structure was quite corresponded to this type of pre-capitalist economy.

In what way the Soviet government built the state capitalism

If the capital is understood as man made inputs (buildings, machinery, financial assets, production infrastructure, etc.), its increase has been a major public concern for the Soviet time. Our country had to make sacrifices of massive primary accumulation of capital to create an industrial society after indecision of NEP of the 1920s. This hard and tragic period in Russian history is known as the "collectivization." Mainly a type of individual peasant farming was curtailed in the 1930's in the village. Material and labor resources of agriculture were directed at creating commodity enterprises (collective and state farms), through which means were pumped for the industry.

Amazing and unique experience in building the Soviet state capitalism is that the government had mobilized resources for the modernization of the agrarian (feudal) society, and then it deterred a Russian village economy with low capital within 30 years (!). In 1930 – 1950-s in Russia the mechanism of peasants' duties has been restored these were familiar to peasants over several centuries (developmental, food, money), the farmers' passports were confiscated, but "their own" land was remained in the form of small household parcels [3].

Once in town, in the industry, the creation of an industrial society has been completed - the country was "set free." In 1958, peasants' duties were abolished, in 1960. Village has been transferred to wages; in the 1970s the passports were introduced. Then, from 1960s capital (previous work) became a major force in the production of agricultural products. Collective and state farms worked with large-scale machine technology, received government pouring of money, participated in government programs of land reclamation, chemicalixation etc. In the 1980's even in the production of agricultural products capital worked by 80% and a living work accounted only 20% [4]. And this is the main indicator of capitalization which took place.

Was there socialism?

Was there socialism under state capitalism? In part, there was. In the hands of ideologues and pragmatists of state capitalist development in the USSR it was a method of control. In the minds of those who believed the Communism it was their ideology. The Soviet people believed that socialism is equality and fraternity, a national tolerance, free education and medicine, and other social benefits. Socialist nature of Soviet politics, of course, was and meant the redistribution of national income through the funds of public consumption. Socialism was a bright, beautiful theory and propaganda cover for the solution of such very pragmatic problem as State capitalistic transformation of our country.

New classes of the Soviet bourgeois society

In the time of the Russian state capitalism in the social structure there was formed not "trehchlenka" (ternary structure: the working class, collective farmers, and intelligentsia is a stratum between them). Blows to these ideas had been stricken in the Soviet period already. In the second half of the twentieth century, Soviet sociologists have become to fix in managing stratum the signs of increasing functions of owners (in particular, disposal and use).

Socio-economic system, state capitalism, which had been created in terms of the sacrifices and hardships, demanded a complete restructuring of society, the appearance of other new classes. In Soviet society capitalized by State there were five these classes formed at least.

First, it is protobourgeoisie – the predecessor of the bourgeoisie class, which has taken a major role in the implementation of property rights, but functioned in terms of divided ownership. The backbone of this class has consisted of the list of high-ranking party and state functionaries, the directors of factories, state farms, and chairmen of collective farms.

The second class of state capitalism in Soviet society consisted of managers, executives and managers of resources (middle managers, department heads, supervisors, managers of offices, farms, chief accountants). Intellectuals became the third class (there were the owners of the knowledge and qualifications – engineers, livestock specialists, and agronomists), the fourth class was the class of labor aristocracy (skilled workers in industry and agriculture, which worked on machinery and transferred the previous work to value of the product). The fifth class under the Soviet state capitalism was the proletariat (its main characteristic was distance from the property and power, unskilled manual labor) [5].

This class division was typical for all spheres of society – urban and rural. New classes in the Soviet times not only appeared, they had been differentiated by law and in legal terms, and they even started the class struggle. Each of the social classes of the Soviet state capitalism had a special place in the relations of ownership, self-awareness, social and psychological characteristics.

What have we been building since 1991?

Contrary to the prevailing notion about transition to the capitalism in post-Soviet period statistics records the process of reducing capital and decapitalization during the last two decades. Only for the 1990s Russian engineering products decreased by 6 times, investment in agriculture decreased by 35 times, etc. [6]. And now the capital goes away from the real economy, particularly abroad, in 2011 its outflows has been 80 billion dollars [7]. The industries, the symbols of capitalized economy (machinery, machine tools, etc.) have been destroyed; there are degradation of intellectual capital and its escape from the country.

Judging by the scale of change, the pace of development and capital accumulation, the structure of production, the level of human potential development the Soviet period was the period of construction of state capitalism, and the subsequent "capitalist reforms" has become the time of decapitalization of Russia.

P.S.

Soviet history shows that in Russia the most successful forward movement develops in the state-capitalist form (and in the world history it is associated with the accumulation of capital and its work in production). Thought about the state's role in Russian progress is not opening. Historians wrote about these features of civilization related to climate, vast territory, land borders and often hostile environment in our country as early as the XIX century. The known features of communal mentality of the Russians, historical destinies of folding of our state in fights with foreigners should be also mentioned.

Grate specific of Russia makes it impossible to accept here Western model of capitalism without substantial corrections. It is not accidental that free-market economy was limited of the planned variant of economic development in Soviet times. This stemmed not only because of ideological negation of the market (by the way, the market was in the USSR, although many don't want to admit it now), but there were serious economic reasons in a large heterogeneous country and it allowed to soften the inevitable crises for a capitalist economy.

Of course, it is wrong to call for the total nationalization of the Russian economy, especially sectors that make it possible to meet consumer demand. But with all the significance of withdrawal of government from the economy at the last two decades, Russia has an urgent need to restore the state-capitalist model of development in the priority sectors of the economy.

This is prompted by both the features of our country and the contemporary processes of globalization, which have almost replaced the so-called "free competition" on rigid dictates of the interests of the receipt of the highest capitalist profit.

The main capital generating and science-intensive sectors should be concentrated in the hands of our state, that make it possible to direct concentrated resources to reindustrialization (restoration) in fact and the creation of the post-industrial model. Only the state's will, not private or oligarchic, can change the galloping evolution of the country towards the raw and virtual (speculative) economy. The interests of individual Russian capitalists and their alliances and especially foreign investors can not create a healthy economic space, and, therefore, can not carry out tasks of social progress, as the current and past Russian experience has shown.

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Bank *details*: ITIN 3525086170, RRC 352501001
FTD in the Vologda Oblast (ISEDT RAS personal acc. 03301113650)
sett. acc. 40503810100001000206 (off-budget)
MCPC Bank of Russia in the Vologda Oblast, Vologda
BIC 041909001, ARCEO 22774067, AUCEB 95110
Purpose of payment 31930201010010000130 p.3 "Publication of printed matter"

Editor	L.N. Voronina
Make-up page	T.V. Popova, E.S. Nefedova
Proof-reader	T.E. Ezovskich
Translators	I.G. Kudryavtzeva, N.N. Paramokhina, O.V. Druzhininskaya, I.A. Rusinova, O.V. Tretyakova

Passed for printing 16.03.2012.
Format 60×84 1/8. Digital recording. Poster paper.
Con. pr. sheets 17.5. Number of 100 copies. Order № 105.

Certificate of registration of mass media PI FS77-37798 dated October 12, 2009 in the Federal Service for Supervision of Telecom and Mass Communications (Roskomnadzor)

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Founder: Institute of Socio-Economic Development of Territories of RAS
The make-up page is edited and printed in ISEDT RAS