

Comparative evaluation of the economic development of underdeveloped areas in the Republic of Komi*

The development of northern territories is always one of the priorities of state policy in Russia. The northern regions, on the one hand, are rich in mineral resources, forest and water resources; on the other hand, today they are the areas with stopped productions and redeveloping cities, rapidly losing their population and infrastructure. The development of new northern territories is extremely slow; the most part of their mineral potential is not ready for industrial development and requires further geological exploration and economic evaluation. The article deals with the developmental problems of the northern regions in the case of some territories of the Republic of Komi.

Northern territories, development, resource potential, underdeveloped areas, progress, socio-economic analysis, evaluation.



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The Republic of Komi is an old industrial resource region, but despite this, a large part of its territory is characterized as underdeveloped and under-populated. The aim of this study includes the determination of the least economically developed and redeveloping territories, location of the similar

areas, selection of promising directions of their development and the ideology of their resource potential.

According to these objectives, the economic situation in some regions in the Republic of Komi has been estimated; the districts have been differentiated based on their industrial

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development indicators, population's incomes and infrastructural conditions. According to the types of districts, the opportunities for their development have been considered on the base of available mineral resources.

There is an analysis of the indicators that characterize the total level of economic development of a territory, the level of an infrastructural component and demographic situation in order to determine the threshold values that allow us to consider the territory as insufficiently explored and poorly involved in the economic turnover.

The following general economic indices have been chosen: per capita industrial production and the volume of capital investment, wage rate and the share of unprofitable enterprises [4]. Some indices (average per capita industrial output, average wage, average per capita investment) have been correlated with the average figures for the Republic in order to assess the situation in the districts at the regional level.

Investment infrastructure has been estimated in terms of the number of construction companies and the amount of building materials, as well as by the density and the length of a road network. In addition, the average per capita indices of production and electricity and heat transmission have been considered. To assess the degree of territorial development, socio-economic indicators have been studied in the dynamics from 1990 to 2008 – 2009.

Tables 1 and 2 show the most important indices of the economic situation in the cities and regions of the Republic of Komi in 2009 [6].

The group of districts that have the lowest industrial production indices consists of the following southern agricultural areas: Koygorodsky District, Kortkerossky District, Priluzsky District, Sysolsky District and Ust-Kulomsky District. Per capita industrial production in these areas is 20 – 30 times lower than the average rate in the Republic.

The ratio between the same indices in the second group of districts is 12 – 13 times. This group consists of Troitsko-Pechorsky District and Udorsky District.

The third group of districts includes Knyazhpogostsky District, Ust-Vymsky District, Ust-Tsilemsky District, Izhemsky District, Syktyvdinsky District and Intinsky District. The industrial production rate in these areas is 3 – 5 times lower than the republican average rate. The district of Vorkuta can be included in this group; per capita production rate has halved in this area since the 1990s.

The fourth group of districts is obvious: it includes Usinsk, Pechora, Ukhta and Sosnogorsk industrial hubs. Vuktyl has the special position here: there was a significant drop in its industrial production in 2000 – 2005.

Considering the dynamics of industrial production for the period since 1990, it is easy to see the rapid decline in such districts as Koygorodsky, Kortkerossky, Priluzsky, Sysolsky, Ust-Kulomsky, Troitsko-Pechorsky and Udorsky. At the same time, there was an increase in the sharp differentiation of those districts in terms of industrial output in the period from 1990 to 2005. That differentiation had smoothed a little bit only by 2009. So, if the difference in per capita industrial output between the “poorest” Ust-Tsilemsky District and the “richest” Usinsk District was 6.4 times in 1990, then it was 314 times in 2005.

An average per capita level of investment has been considered as another indicator that characterizes the total economic situation in the districts and the level of investment activity (*table 3*).

The following groups of districts have been identified on the base of the ratio in the average republic level. The group of districts that have the lowest per capita investment rates includes Troitsko-Pechorsky District and Ust-Kulomsky District: the share of investment in these areas is 20 times lower than the average investment rate in the Republic of Komi. In addition, there was a rapid decline in capital investment in these areas in recent years.

Table 1. Indicators of overall economic development of the cities and districts in the Republic of Komi

City / District	Ratio of an average per capita industrial production index of the districts to an average republic index	Ratio of an average wage index of the districts to an average national index, %	Average per capita district investment in regard to average per capita republican investment	Share of unprofitable enterprises, %
Syktvykar	0.69	89.1	0.7	35
Vorkuta	0.67	115.6	0.2	34
Vuktyl	1.86	121.8	0.1	60
Inta	0.25	97.2	0.1	30
Pechora	1.07	106.1	0.7	27
Sosnogorsk	1.15	101.8	0.5	48
Usinsk	5.30	163.6	2.9	31
Ukhta	1.87	120.8	3.7	38
Izhemskiy	0.40	61.7	0.4	75
Knyazhpogostsky	0.11	70.2	0.2	50
Koygorodsky	0.03	54.7	0.1	50
Kortkerosky	0.03	56.4	0.1	60
Priluzsky	0.05	59.7	0.1	40
Syktvydinsky	0.28	72.6	0.2	39
Sysolsky	0.03	56.1	0.1	83
Troitsko-Pechorsky	0.07	55.6	0.04	50
Udorsky	0.08	55.4	0.1	70
Ust-Vymsky	0.18	72.8	0.15	50
Ust-Kulomsky	0.03	53.9	0.04	80
Ust-Tsilemsky	0.36	62.4	0.3	–
For reference only: absolute figures for the Republic of Komi	Per capita industrial production 254 thsd. rub.	Average wage 20.8 thsd. rub.	Average per capita investment 113.5 thsd. rub.	38

Table 2. Per capita industrial production in the city / district in regard to per capita production in the Republic

City / District	1990	2000	2005	2009
Syktvykar	1.16	0.83	0.84	0.69
Vorkuta	1.06	0.96	0.87	0.67
Vuktyl	1.13	0.57	0.13	1.86
Inta	1.42	0.52	0.26	0.25
Pechora	0.67	1.17	0.90	1.07
Sosnogorsk	1.10	1.71	0.84	1.15
Usinsk	1.43	6.66	6.15	5.30
Ukhta	1.15	0.62	1.49	1.87
Izhemsky	0.29	0.06	0.44	0.40
Knyazhpogostsky	1.09	0.25	0.34	0.11
Koygorodsky	0.60	0.36	0.05	0.03
Kortkerosky	0.43	0.13	0.02	0.03
Priluzsky	0.48	0.13	0.04	0.05
Syktvydinsky	0.53	0.30	0.23	0.28
Sysolsky	0.40	0.12	0.09	0.03
Troitsko-Pechorsky	0.60	0.16	0.06	0.07
Udorsky	2.11	0.38	0.08	0.08
Ust-Vymsky	0.72	0.27	0.47	0.18
Ust-Kulomsky	0.53	0.15	0.02	0.03
Ust-Tsilemsky	0.23	0.06	0.03	0.36
For reference only: Industrial production in the Komi Republic for 1 person, thsd. rub.	3.2	51.2	148.1	254.4

The per capita investment rate is 18 times lower than the average republican rate in the second group of districts. It includes most southern districts of the Republic: Koygorodsky District, Kortkerossky District, Priluzsky District, Sysolsky District, as well as Inta and Vuktyl. Udorsky District is also in this group. As in the previous group, the share of these territories' investment in the average Republic's investment declined in the last five years, and the greatest investment drop took place in Vuktyl.

There is a rather good investment situation in Izhemsky District, Ust-Tsilemsky District, Knyazhpogostsky District, Ust-Vymsky District and Syktyvdinsky District. The ratio between the average republican rate and the share of district investments in this group does not exceed 10-fold value (0.1 – 0.4 un.; table 3). Vorkuta is also in this group: investment activity has been falling here since 1995.

Per capita investments are 3 – 4 times higher than in the Republic in the districts that are attractive for investment. This group includes Usinsk and Ukhta Districts, which are the stable oil production and refining centers. This ratio has been remaining over the last 20 years. Sosnogorsky and Vuktylsky Districts could be included in this group in the early period.

The assessment of the financial condition of economic entities has shown that the most of unprofitable enterprises are located in Sysolsky District (83%), Ust-Kulomsky District (80%), Izhemsky District (75%) and Udorsky District (70%). The share of unprofitable enterprises in these areas has exceeded 60% over the period from 1995 till 2000. The second group includes traditionally unprofitable Kortkerossky District (60% of unprofitable enterprises) and Vuktylsky District that had only a quarter of insolvent businesses

Table 3. Average per capita investment of the districts in regard to average per capita investment in the Republic of Komi

City / District	1990	1995	2000	2005	2009
Syktyvkar	0.6	0.7	1.0	0.5	0.7
Vorkuta	0.7	0.9	0.5	0.5	0.2
Vuktyl	1.6	5.1	0.8	2.1	0.1
Inta	0.6	0.7	0.4	0.2	0.1
Pechora	0.7	0.5	1.4	0.8	0.7
Sosnogorsk	1.0	1.4	1.1	0.8	0.5
Usinsk	2.3	2.3	4.9	3.0	2.9
Ukhta	1.1	1.4	0.9	3.3	3.7
Izhemsky	0.6	0.9	0.3	0.6	0.4
Knyazhpogostsky	0.5	0.6	0.5	1.6	0.2
Koygorodsky	0.6	0.2	0.2	0.3	0.1
Kortkerossky	0.4	0.4	0.2	0.1	0.1
Priluzsky	0.6	0.4	0.2	0.2	0.1
Syktyvdinsky	0.7	0.9	0.4	0.4	0.2
Sysolsky	0.4	0.3	0.3	0.1	0.1
Troitsko-Pechorsky	0.7	0.6	0.2	0.3	0.04
Udorsky	0.7	0.4	0.4	0.2	0.1
Ust-Vymsky	0.3	0.5	0.3	0.3	0.15
Ust-Kulomsky	0.5	0.8	0.5	0.1	0.04
Ust-Tsilemsky	0.7	0.6	0.3	0.5	0.3
For reference only:					
Average per capita investment in the Republic of Komi. thsd. rub.	2.7	3443	16.3	50.9	113.5

in 1995, the share of which grew more than twice in 2009. The next group includes the districts which have about 50% of unprofitable enterprises. They are Koygorodsky District, Troitsko-Pechorsky District and Ust-Vymsky District. It should be noted that the number of unprofitable enterprises decreased in Inta, Vorkuta and Pechora in 2009 as compared with 2005. It was caused by the closure of pits and closing down of co-operating businesses in Inta and Vorkuta.

The ratio of an average district wage rate to average republic wage rate has been considered in the dynamics for the period from 1990 till 2008 in order to assess population's income in terms of remuneration of labour (table 4).

It is possible to divide three groups of districts in this context: the districts with the lowest wages and deteriorating dynamics, the districts with a stable average wage rate and traditional "rich" districts.

There are most agricultural regions in the first group. They are Koygorodsky District, Kortkerosky District, Priluzsky District, Sysolsky District and Ust-Kulomsky District. There is the traditionally lowest wage rate in these regions of the Republic; it has not exceeded 60% of the average regional level over the last 20 years. This group also includes Udorsky District and Troitsko-Pechorsky District, whose economy is largely based (or was based in the past) on the logging industry. In contrast to the above-mentioned regions, these two regions had the average wage rates in the early 1990s: wages were about 80% of the republican level there. For example, the average income of a resident of Troitsko-Pechorsky District was comparable to the income of Syktyvkar's residents in 1990, but it halved in 2000. There has been a trend to the increase in wages in the "low-paid" districts recently, however, this increase is negligible.

Table 4. The ratio of the average district wage rates to republic wage rates, %

City / District	1990	1995	2000	2005	2008
Syktyvkar	86.2	83.1	86.4	89.7	89.1
Vorkuta	135.9	161.3	130	113.8	115.6
Vuktyl	103.9	126.8	132.8	136.6	121.8
Inta	126.7	147.5	108.4	89.9	97.2
Pechora	96.4	92.7	109.4	104.5	106.1
Sosnogorsk	98.3	90.7	126.6	105	101.8
Usinsk	142.5	111.7	205.5	174.5	163.6
Ukhta	107.8	106	126.4	123.1	120.8
Izhemsky	71.4	54.3	39.2	52.3	61.7
Knyazhpogostsky	71.1	62.9	51.9	71.5	70.2
Koygorodsky	68.0	55.4	60.7	54.5	54.7
Kortkerosky	68.0	50.7	45.8	49.7	56.4
Priluzsky	67.2	53.6	43.2	54.3	59.7
Syktyvdinsky	78.4	58	47.7	63.6	72.6
Sysolsky	68.9	54.3	46.1	51.2	56.1
Troitsko -Pechorsky	84.5	64.8	51.4	53.2	55.6
Udorsky	77.7	73.7	51.3	52.2	55.4
Ust-Vymsky	74.5	70.5	69.7	76.3	72.8
Ust-Kulomsky	65.3	48.5	44.6	47.8	53.9
Ust-Tsilemsky	76.7	56.3	45.4	56.5	62.4
For reference only: The average wage rate in the Republic of Komi, thsd. rub.	412	878	3.6	11.6	20.8

The second group includes Ust-Vymsky District, Ust-Tsilemsky District, Syktyvdinsky District, Izhemsky District, Knyazhpogostsky District and Intinsky District. A wage rate in these areas accounts for 70%; it is higher than an average republic wage rate or equal to it (Intinsky District). This group is characterized by the industrially-oriented economy, which is based on the lumbering, coal mining, and food industries, as well as freight transportation. There was a significant reduction in wages in Intinsky District due to the closure of pits and general degradation of the regional economy.

The third group includes industrial regions of the Republic: Usinsky District (164% of the average national wage rate), Ukhtinsky District (121%), Vuktylskiy District (122%), Pechorsky District (106%), Sosnogorsky District (102%), Vorkutinsky District (116%). Wages are traditionally high in these regions. However, there are tendencies associated with the coal industry restructuring, changes in tax laws and intergovernmental policy.

Thus, a wage rate in Vorkuta has decreased more than 1.5-fold over the last 10 years due to the decline in the coal industry. There was a record wage rate in Usinsky District, when the average monthly wage was 2 times higher than the average wages in the Republic; but the wages were reduced because of oil income redistribution in favor of regional and federal budgets, and, as a result, there was a total reduction of budget costs and oil companies' cost optimization.

The evaluation of investment infrastructure was based on such indicators as highway density, the number of construction companies, production of building materials, electricity and thermal energy generating and distributing (table 5).

Highway density is rather low in most regions of the Republic – up to 20 km per 1000 sq. km. The lowest highway density is in the areas of Inta, Vorkuta and Vuktyl – up to 5 km per 1000 sq. km. There is a poor motor traffic in Ust-Tsilemsky and Troitsko-Pechorsky

Table 5. Selected indicators of investment infrastructure of the cities/districts in the Republic of Komi in 2009

City / District	Commissioning of hard surface highways of public service in the cities and districts, km	Generation, transmission and distribution of electricity, gas and water per capita, thsd. rub.	Number of construction companies	Production of building materials, mln. rub.
Syktyvkar	–	42.0	1051	673
Vorkuta	–	36.4	108	357
Vuktyl	–	12.0	19	0
Inta	–	23.1	41	14
Pechora	18.9	74.0	86	88
Sosnogorsk	–	52.0	70	0
Usinsk	–	48.8	194	0
Ukhta	3.3	15.8	430	399
Izhemsky	–	2.9	10	0
Knyazhpogostsky	–	10.9	20	0
Koygorodsky	–	6.1	2	0
Kortkerossky	–	5.3	12	0
Priluzsky	–	5.9	12	0
Syktyvdinsky	–	4.9	24	0
Sysolsky	–	5.4	11	0
Troitsko -Pechorsky	–	6.4	2	0
Udorsky	29.9	9.3	15	0
Ust-Vymsky	–	7.2	9	5
Ust-Kulomsky	1	3.1	5	0
Ust-Tsilemsky	0.3	4.6	7	0

Districts, as well as in the regions of Usinsk and Pechora, where highway density does not exceed 10 km per 1000 sq. km. There is the best traffic in the southern regions and in the neighboring regions of Syktyvkar. The amount of commissioned roads has significantly reduced over the last decade. If more than 180 km hard surface highways were put into operation in the Republic in 2000, then only 53 km of roads were built in 2009 and 9 km in 2008. Since 2002 there is no road construction in Intinsky, Vorkutinsky, Troitsko-Pechorsky and Knyazhpogostsky Districts.

Rural areas lag behind urban districts in per capita production, transmission and distribution of electricity, gas and water. This indicator does not exceed six thousand rubles in most areas, except Knyazhpogostsky Districts and Udorsky District.

The production level of building materials is quite low in the region. The share of the construction industry in the structure of industrial production was comparable with wood, gas and oil-processing industries in the 1970s - early 1990s. However, the production of building materials declined sharply after the beginning of economic reforms. The main reasons involved a general decline in the industrial production and reduction in housing and industrial construction. Therefore, there was a more rapid reduction in the production of building materials as compared with other sectors.

Today, the construction industry of the Republic of Komi is represented by the extraction of mortar sand, sand-gravel mixtures, brick clay, limestone and dolomite, production of cement, building lime, bricks, wall panels, crushed stones, etc. There was a sharp decline in production of all the types of building materials and reduction in their product range in the early 1990s. Production output has decreased more than 2-fold over last decade. Building materials are produced mainly in Syktyvkar, Ukhta, Vorkuta, Pechora, as well as a small volume of materials is produced in Intinsky District and Ust-Vymsky District.

The analysis has showed a rather low level of general economic and infrastructural development of most districts in the Republic. In general, low economic performances in most areas are caused by the high rates of decline in industrial production over the last 15 years. There is also a sharp differentiation of economic development indicators between the districts.

It is proposed to use the following boundary values to define the most underdeveloped or redeveloping territories:

- a ratio of an average republican index of per capita industrial production to an average regional index is equal to or less than 10 un.;
- a ratio of republican to regional average per capita investment is equal to or less than 10 un.;
- a regional average wage rate is equal to or less than 60% of an republican wage rate;
- the number of unprofitable enterprises is equal to or more than 50% of the total number of companies;
- highway density is less than 20 km per 1000 sq. km.

Taking into account the results of this analysis and fixed boundary values, it is possible to divide the following groups of underdeveloped territories and territories poorly involved in the economic turnover:

- ◆ The districts that have a lack of infrastructure, undeveloped industry and low population settlement, but, as a rule, they have unclaimed mineral, forest, land and recreational potential. Troitsko-Pechorsky, Ust-Tsilemsky and Sysolsky Districts can be included into this group.
- ◆ The districts that have the “deindustrialization” of manufacturing production with a relatively developed infrastructure. This group includes Inta and Vorkuta Districts.
- ◆ The districts of the “new” economic development, which are located in the affected zone of implementing and prospective invest-

✓ increasing utilization of coal mine methane in the degasification of mine fields and mines.

The main problems of the development of northern territories include their remoteness from outlets and their underdeveloped infrastructure that needs a lot of expenses on the development in the conditions of the North, which determines the implementation of investment projects at the pay limit.

The experience of foreign northern countries and regions shows that the developmental problems can not be solved within the scope of “a pure business approach” that is aimed only at commercial viability. New projects implemented in the undeveloped northern regions can be successful only with the active support of federal and local authorities and in the realization of public-private partnership.

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