

# TERRITORIAL ORGANIZATION AND MANAGEMENT

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## PROBLEMS AND PROSPECTS OF TRANSFORMATION OF SMALL AND MEDIUM MINING CITIES INTO REGIONAL GROWTH POLES (CASE STUDY OF THE NWFD)



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*The development of small and medium cities in Russia has been and remains relevant. Small and medium mining cities deserve special attention. In Soviet times, there was a peak in their development, but now they have partially lost their potential, and some of them are in crisis. The aim of our study is to develop practical recommendations for the transformation of extractive small and medium cities into regional growth poles, taking into account their socio-economic specifics and key development factors. Based on the scientific literature analysis, we found that the key factors in the formation of growth poles are the consideration of the existing total economic potential, developed engineering, commercial infrastructure and institutional environment, and a sufficient level of financing. Using the example of the Northwestern Federal District, common problems of small and medium mining cities have been identified: an undiversified economy; a reduction in investment (Inta and Vorkuta); a decrease in population; difficult natural and climatic conditions due to the location of cities in the Far North and areas equated to it. We proposed the directions of economic transformation for some cities: the development of alternative deposits, the extraction of rare earth elements from landfills, scientific and industrial cooperation, the opening of new areas of personnel training in institutions of higher and secondary special education; general recommendations are given on creating conditions for the transformation of the economy into a growth pole at the regional level. The scientific novelty of the work consists in substantiating promising*

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areas for the development of extractive small and medium cities based on the commercialization of their strengths. The materials of the article may be useful to local governments of small and medium mining cities and regional government authorities to develop policies for the development of cities of this type and adjacent territories.

*Poles of growth, mining cities, small and medium cities, economic transformation, spatial development.*

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### Introduction

The issues of spatial development in Russia remain highly relevant. According to the Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036, one of the important strategic tasks facing the country is “creating conditions to ensure the stability of the settlement system in the Russian Federation, including conditions to halt the outflow of the permanent population from the regions of Siberia, the Far East, and the Arctic, as well as from small and medium-sized towns and rural areas”<sup>1</sup>. Cities, as centers of productive forces, play a key role in the settlement system of any country (Sekushina, 2018; Sekushina, 2022; Rastvortseva, Manaeva, 2023). Among them, an important place is occupied by small and medium-sized towns (SMTs), which serve as hubs of the territorial support framework, ensuring balanced territorial development and providing conditions for living and working outside major urban centers (Lappo, 1997; Lyubovny, 2012; Sekushina, 2024; Seleznev et al., 2025).

Among SMTs of all specializations, mining cities deserve particular attention. For the most part, they are single-industry towns and during the Soviet era acted as growth poles for their regions (Sekushina, 2024). A city,

along with several surrounding settlements to support it, was built around a single large mining enterprise. This served as a driver for the development of the city itself, the adjacent territories, and the region as a whole (Fauzer et al., 2021). For instance, in Vorkuta, whose economy was based on coal mining, the population nearly doubled between 1962 and 1991, rising from 60,000 to 117,000 people; the local standard of living was higher than in Moscow<sup>2</sup>. The city served as a key supplier of coal both for the front during the Great Patriotic War and for industry in the post-war period (Lebedeva, Jiang Dan, 2025).

Following the collapse of the USSR, such single-industry towns began to face difficulties in marketing their extracted resources; enterprises started going bankrupt, and populations began to decline. Thus, in Vorkuta, the population in 2024 stood at 56,100 people (47.8% of its 1991 level). The city itself is currently in a state of economic decline, evidenced by the closure of several mines, the abolition of surrounding settlements, large amounts of abandoned housing, and crumbling infrastructure. In Asbest (Sverdlovsk Region), specializing in chrysotile asbestos mining, the population fell from 81,200 to 55,500 people between 2000 and 2025. In Bodaibo,

<sup>1</sup> The Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036: approved by RF Government Resolution 4146-r dated December 28, 2024.

<sup>2</sup> The Pechora coal basin marks its 90th anniversary. 1966 was a golden year in the history of Vorkutaugol. Available at: <https://xn----7sbbgb7ar5anfxls.xn--p1ai/index.php/kulturno-prosvetitel'skaya-deyatelnost/po-stranitsamistorii/129-pechorskomu-ugolnomu-bassejnu-90-let-1966> (accessed: 16.02.2025).

specializing in gold mining, the population dropped from 17,700 to 8,900 people between 2000 and 2021. In Bilibino, also focused on gold mining, the population decreased from 7,700 to 5,400 people.

The relevance of this study stems from the following aspects.

1. Economic significance. Mining small and medium-sized towns supply a significant share of the mineral resources critical to the country (oil, coal, diamonds, metals, including rare earth elements). A crisis in these towns threatens the country's resource security.

2. Social tension. The economic focus on mineral extraction leads to wage polarization. Higher wages are concentrated in the raw materials sector, while wages in other sectors remain significantly lower, which contributes to the reproduction of poverty. In the event of an enterprise closure, mass unemployment arises and social tension increases.

3. Demographic problems. Typically, in such towns, out-migration exceeds in-migration, weakening the territory's human capital and creating imbalances in the settlement system.

4. The need for new development paths. It is necessary to develop diversification strategies that account for the specific characteristics of small and medium-sized mining towns (Zhang et al., 2023).

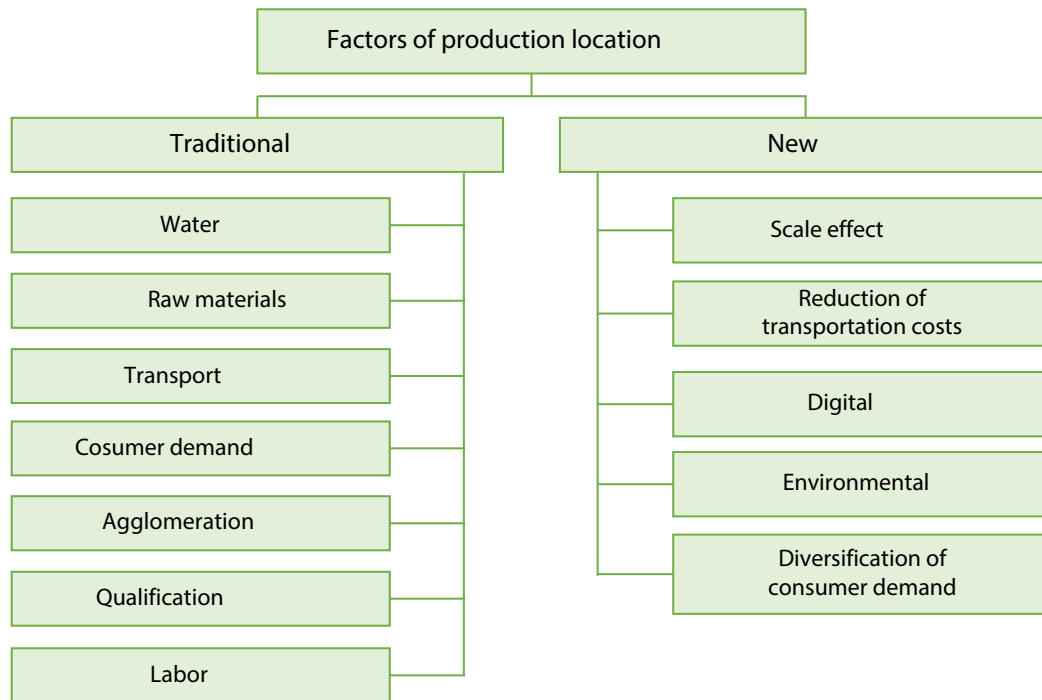
The emerging challenges facing Russia – such as unprecedented Western sanctions, population decline concerns, the climate agenda (the country has committed to achieving carbon neutrality by 2060), and the transition to a new technological paradigm – further exacerbate the already difficult situation of these settlements. This underscores the relevance of the study's aim: to work out practical recommendations for transforming small and medium-sized mining towns into regional growth poles, taking into account their socio-economic specificities and key development factors.

To achieve this aim, the following tasks were set: to define the essence of growth poles and the factors influencing their formation and development; to analyze the socio-economic development of small and medium-sized mining towns and identify their specific characteristics; and to propose promising directions for transforming these towns into regional growth poles.

### **Theoretical framework of the study**

The theory of growth poles originates from the French school of spatial economics. Its author, F. Perroux, defined growth poles as concentrations of dynamically developing economic entities. At the same time, they act as sources of centrifugal forces and as points of attraction for centripetal forces. Each pole, being both a center of attraction and repulsion, has its own field, which exists within the fields of other poles (Perroux, 1950). J. Boudeville demonstrated that not only enterprises but also territories can serve as growth poles (Boudeville, 1972). The French economist P. Pottier extended this theory by examining the potential effects of growth poles through development axes. In his view, territories located between such axes also receive development impulses through increased freight flows, the spread of innovations, and the construction of necessary infrastructure (Pottier, 1963). In this study, a growth pole is understood as a territorial concentration of dynamically developing economic entities (Bukhval'd, 2017).

Growth poles typically form where conditions are favorable, specifically where necessary traditional and new factors of production location are present (*Fig. 1*). These factors enable growth poles to acquire such distinctive features as high investment attractiveness; stable demand for the products that form the core of their economic specialization; close cooperative and innovative interaction among businesses; and well-developed infrastructure.



**Figure 1. Traditional and new factors of production location**  
 Sources: (Kolossofsky, 1969; Bandman, 1980; Fujita, Krugman, 2003).

In studying the process of establishing such growth poles, it was found that the greatest development impetus was provided by those whose formation occurred under conditions where the necessary factors of production location were present. In particular, international experience highlights the importance of a favorable institutional environment, consideration of economic potential, coordinated policies at the local and regional levels, and well-developed infrastructure (Tab. 1).

Researchers who have studied international experience in creating growth poles have identified several features of the policies that enabled these towns to achieve notable results. For example, in Brazil, the fruit cluster in Petrolina-Juazeiro was created, which by 2005 accounted for 40% of the country’s fruit exports, and in some sectors, such as viticulture, this figure reached 90% (Damiani, 2007). In Costa Rica, an IT cluster

was established based on a USD 300 million Intel semiconductor assembly and testing plant. This served as a catalyst for revising educational curricula for workforce training and for creating a Center for High Technology, whose activities aimed to foster linkages between academic research and industries in information technology, nanotechnology, and advanced manufacturing. Thanks to this plant, not only the electronics sector grew, but also the medical device, automotive components, and business services sectors (Oviedo et al., 2015; Frick, Rodríguez-Pose, 2025).

In the cities of Taolagnaro and Nosy Be in Madagascar, following the implementation of the “Integrated Growth Poles” project, tax revenues grew by 85% annually, and the share of the population with access to basic infrastructure, particularly drinking water sources, increased: in Nosy Be from 13 to 74%, and in Taolagnaro from 50 to 95%<sup>3</sup>.

<sup>3</sup> Madagascar – Integrated Growth Poles and Corridor Project 2: P113971 – Implementation Status Results Report: Sequence 03. World Bank. 2015. 16 p. Available at: <https://documents1.worldbank.org/curated/en/277351467135807185/pdf/ISR-Disclosable-P113971-06-28-2016-1467135793823.pdf> (accessed: 10.08.2025).

**Table 1. Examples of successful international experience in establishing growth poles**

Territory	Expected result	Measures	Success factors
Petrolina and Juazeiro (Brazil)	Fruit cluster. Development of a high-income agricultural cluster leveraging soil quality, topography, and year-round sunshine	Creation of a large-scale irrigation system; attraction of agricultural companies; provision of financial and technical support to small farmers; conducting agricultural R&D	Large-scale public investment in irrigation infrastructure combined with strategic attraction of agricultural companies, financial and technical support for small farmers, and provision of agricultural research
Costa Rica	Creation of an IT cluster	Updating the existing free trade zone scheme; adapting workforce training for the electronics cluster; supplier development program	Large private investment, favorable business environment, workforce training
Nosy Be and Taolagnaro (Madagascar)	Tourism development (under the "Integrated Growth Poles" program)	Combination of locally targeted measures (including modernization of urban development plans, port facilities, and utilities) and broader measures to improve the country's business environment	Favorable business environment, modernization of urban development plans, ports, and utilities
Da Nang, Vietnam	Achieving growth rates above the national average	Creation of industrial zones; airport modernization; participation in the "Green Cities" project supported by the Asian Development Bank	High levels of financing, favorable business environment, developed infrastructure

Compiled based on: (Frick, Rodríguez-Pose, 2025; Vietnam's Provinces, Regions, and Key Economic Zones (2017). Vietnam, Briefing. No. 3. 12 p.; Madagascar – Integrated Growth Poles and Corridor Project 2: P113971 – Implementation Status Results Report: Sequence 03. World Bank. 2015. 16 p. Available at: <https://documents1.worldbank.org/curated/en/277351467135807185/pdf/ISR-Disclosable-P113971-06-28-2016-1467135793823.pdf> (accessed: 10.08.2025); The Impact of Intel in Costa Rica. World Bank. 2006. 52 p.).

In Vietnam, the transformation of Da Nang led to a fivefold increase in the GDP of the central region between 1997 and 2014, and the implementation of 350 projects into which foreign investors poured USD 3.5 billion. The region's economic structure also transformed: if at the end of the 20th century agriculture dominated, the current stage is characterized by a predominance of services, industry, and construction (over 90% of GRP)<sup>4</sup> (Frick, Rodríguez-Pose, 2025).

According to the authors (Frick, Rodríguez-Pose, 2025), the success of these growth poles is due to clear economic and institutional potential, coherence of the measures taken, public support, and the presence of an active private investor.

Furthermore, researchers have also examined unsuccessful experiences in developing growth poles. The main reasons for the failure of such projects were inadequate infrastructure (both engineering and commercial), the absence of an assessment of economic potential and prerequisites for developing specific industries, and an underdeveloped institutional environment.

For example, in Indonesia, the objectives for creating growth poles were to enhance the competitiveness of peripheral regions, increase their investment attractiveness, create jobs, and develop exports. To this end, in 1993, 14 municipal programs known as "integrated economic development zones" were launched. These programs set targets for raising per capita

<sup>4</sup> Data Collection Survey on Sustainable and Integrated Urban Development in Da Nang. Japan international cooperation agency. 2016. Available at: [http://open\\_jicareport.jica.go.jp/pdf/12260584.pdf](http://open_jicareport.jica.go.jp/pdf/12260584.pdf); <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/780871468191351269/madagascar-integrated-growth-poles-project> (accessed: 10.08.2025).

GRP to the national average and for increasing the share of investment and exports in the regions to 20% of the national level. However, an analysis of the implementation results showed that these programs largely failed to achieve their goals. The regions attracted only 3.4% of total investment, significantly below the 20% target. Furthermore, interregional inequality did not decrease.

Another example of unsuccessful transformation of cities into growth poles is Jordan. Here, the primary goal was to develop IT parks outside the capital to address infrastructure deficiencies. Although the IT sector grew by 37% annually and increased its share of GDP from 1.8% to 2.9%, most emerging IT companies preferred to locate precisely in the capital. Moreover, of the three planned IT parks, only one (CyberCity) actually became operational, and it only managed to attract low-tech companies; subsequently, it was partially converted into a refugee camp. Researchers attribute the primary reasons for Jordan's failure to low university engagement, inadequate infrastructure, and the poor location of IT parks in areas with low economic activity (Magableh, 2010; Frick, Rodríguez-Pose, 2025).

### Materials and methods

The object of this study is small and medium-sized mining towns in the Northwestern Federal District (NWFD). Their selection is based on the predominant share of the economic activity "Mining and Quarrying" in the total revenue of the municipality. The subject of the study is their socio-economic development, considering their specialization in mining. The choice of these towns is justified by the challenges characteristic of them, namely their

vulnerability to new challenges facing the country, manifested in the declining economic activity of city-forming enterprises, including due to decreased demand for their products. The search for transformation prospects for such towns was carried out in two stages: 1) analysis of the socio-economic development of the towns at the current stage; 2) identification and proposal of promising types of activities for establishing these towns as growth poles, based on the identified problems and specific features.

The study employs general scientific research methods, such as analysis, synthesis, induction, deduction, and graphical and tabular visualization techniques.

The information base consists of data from the Federal State Statistics Service of Russia and its territorial offices in the regions of the NWFD, as well as the non-profit web-mapping project OpenStreetMap (<https://www.openstreetmap.org>).

### Results and discussion

A total of 11 small and medium-sized towns specializing in mineral extraction are located in the NWFD (*Tab. 2*). Of these, five are in the Komi Republic, three in the Murmansk Region, one in Karelia, and one in the Nenets Autonomous Area.

Previously, the economy of the town of Slantsy in the Leningrad Region also specialized in mineral extraction, but in 2013, the enterprise "Leningradslanets" was abolished<sup>5</sup>. The town of Inta, whose economic specialization was coal mining, should also be noted. In 2019, the enterprise "Intaugol" went bankrupt, and the only operational "Intinskaya" mine was mothballed<sup>6</sup>. Currently, however, the "Kozhimskeye Prospecting and Mining

<sup>5</sup> Leningradslanets OJSC. List-Org: Counterparty verification service. Available at: <https://www.list-org.com/company/4562> (accessed: 01.08.2025).

<sup>6</sup> Komi stated that the conservation of the "Intinskaya" mine would take three years. Available at: <https://tass.ru/ekonomika/18971181> (accessed: 01.08.2025).

**Table 2. Small and medium-sized towns of the NWFD specializing in mineral extraction**

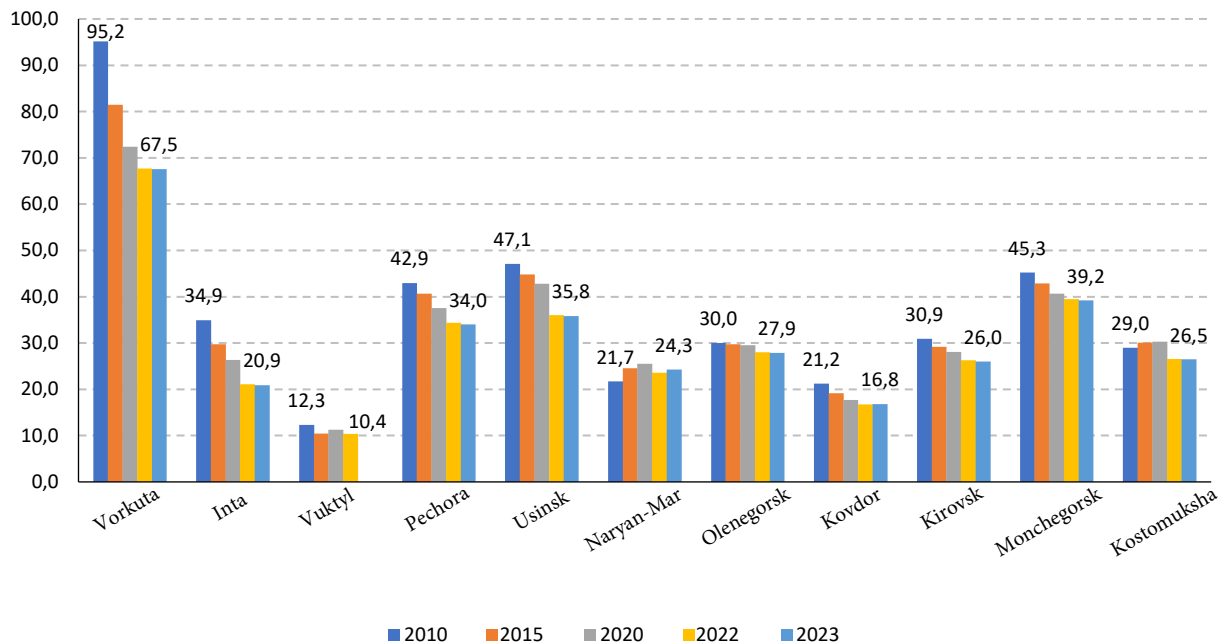
Region	Town	Natural resource in economic use
Komi Republic	Vorkuta	Coal
	Inta	Quartz
	Vuktyl	Gas, oil, gas condensate
	Pechora	Oil, gas, coal
	Usinsk	Oil and associated gas
Nenets Autonomous Area	Naryan-Mar	Oil and natural gas
Murmansk Region	Olenegorsk	Iron ore
	Kovdor	Magnetite ores
	Kirovsk	Apatite-nepheline ore
	Monchegorsk	Copper-nickel ores
Republic of Karelia	Kostomuksha	Iron ore

Compiled from: Spark-Interfax services. Available at: <https://spark-interfax.ru>; OpenStreetMap. Available at: <https://www.openstreetmap.org>

Enterprise” operates in Inta, extracting quartz on the western slope of the Urals<sup>7</sup>.

As noted earlier, small and medium-sized mining towns face challenges in their socio-economic development when confronted with new challenges. One of the most significant is

population decline. Among the towns under consideration, only Naryan-Mar has seen population growth (by 2,566 people between 2010 and 2023), which is due to a high standard of living (high wages in the oil and gas sector, northern bonuses and benefits, etc.; Fig. 2).



**Figure 2. Population of small and medium-sized mining towns in the NWFD in 2010, 2015, 2020, 2022, and 2023, thousands of people**

Source: Database of municipal indicators.

<sup>7</sup> Kozhinskoye Prospecting and Mining Enterprise CJSC. Available at: <http://www.kozhim.ru/> (accessed: 03.08.2025).

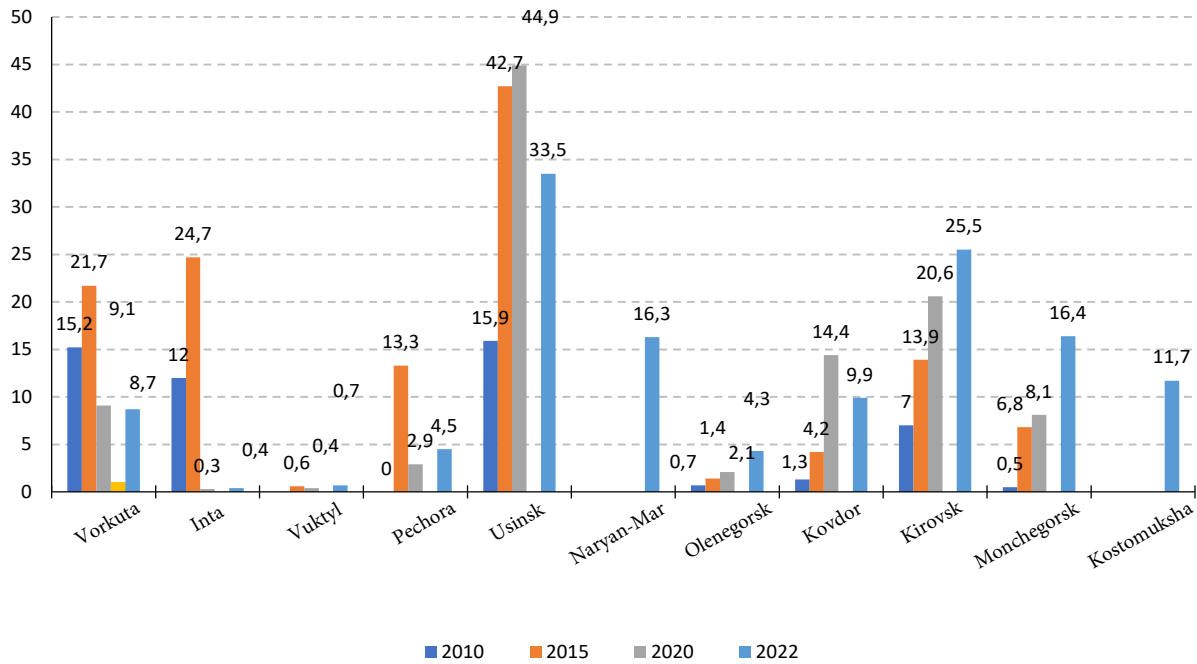


Figure 3. Net migration in small and medium-sized mining towns of the NWF in 2010, 2015, 2020, 2022, and 2023, people

Source: Database of municipal indicators.

The population decline is largely associated with significant out-migration (Fig. 3). In seven out of ten mining SMTs, out-migration is decreasing, but still remains higher than in-migration.

Compared to 2010, the number of arrivals in the towns under consideration has increased; however, when examining this trend relative to 2015, a decline in in-migration can be observed. Out-migration in many cases is associated with job cuts and the scaling back of social infrastructure, which ultimately leads to a reduced quality of life.

The analysis of the economic situation in the mining SMTs of the NWF found that the most investment-active cities are those whose city-forming enterprises specialize in oil and/or gas extraction (Vuktyl, Usinsk) or are part of vertically integrated companies (the Olenegorsk Mining and Processing Plant (MPP) is part of Severstal; the Kirov branch of Apatit is part of PhosAgro; the Kovdor MPP is part of

EuroChem; Fig. 4). The significant decline in investment in Vorkuta and Inta is associated with the closure of several coal mines.

In addition to fixed capital investment, we consider it appropriate to analyze local budget revenues and expenditures in these towns. The analysis showed that in 2020, the local budget was nearly balanced in eight towns, compared to only five towns in 2010. Moreover, both expenditures and revenues of local budgets increased in all towns except Naryan-Mar, where this is attributed to quarantine measures during the coronavirus pandemic and a reduction in budget investments in capital construction projects<sup>8</sup> (Fig. 5).

Furthermore, common problems for the towns under consideration include an undiversified economy, harsh climatic conditions, and the presence of unreclaimed tailings piles and waste dumps from mining operations.

<sup>8</sup> The NAA authorities have reduced budget revenues and expenditures for 2020 due to losses during the pandemic. Available at: <https://tass.ru/ekonomika/8737603> (accessed: 05.08.2025).

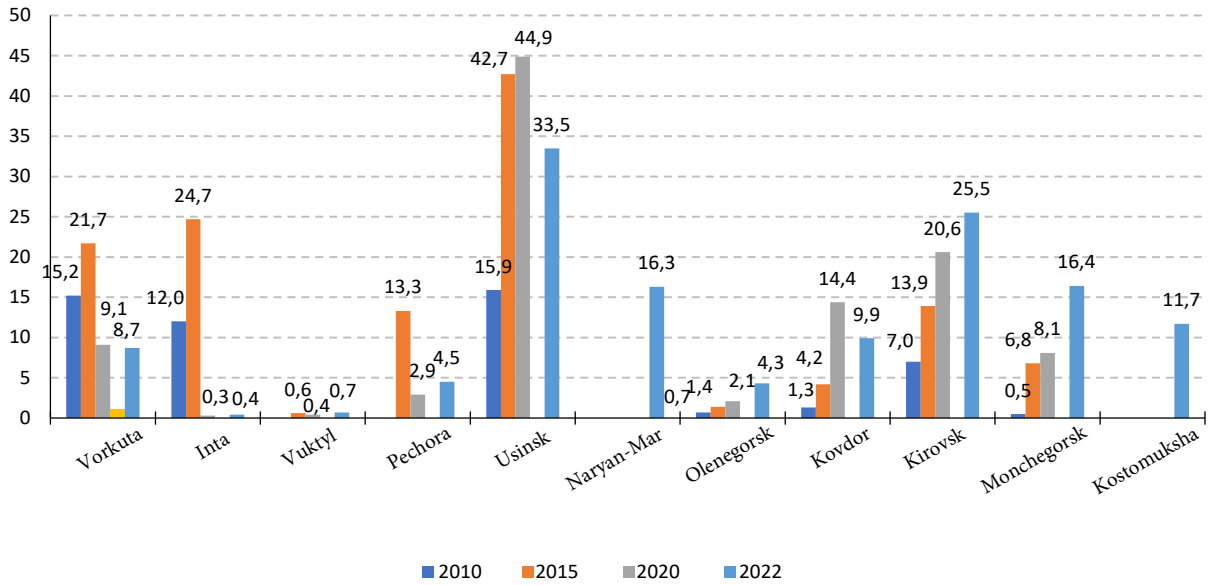


Figure 4. Fixed capital investment in small and medium-sized mining towns of the NWFD in 2010, 2015, 2020, and 2022, billions of rubles

Source: Database of municipal indicators.

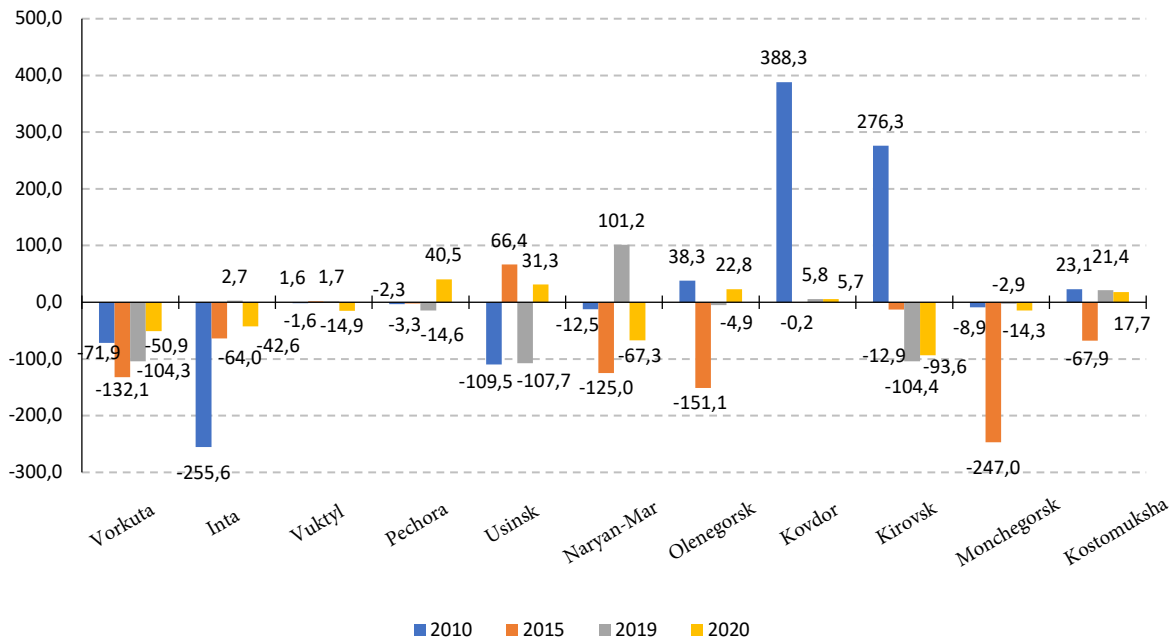


Figure 5. Local budget surplus / deficit of mining SMTs, millions of rubles

Source: Database of municipal indicators.

The data do not cover all spheres of life and only provide a general picture of development trends in mining SMTs. Despite the existing problems, these towns have potential and their own strengths. The specific features of some of the towns under consideration, which

are in a more critical state, along with their corresponding development prospects for further transformation into growth poles, are presented in *Table 3*.

In Kirovsk and Olenegorsk, we believe it is advisable to strengthen cooperation with the

**Table 3. Promising directions for the development of small and medium-sized mining towns in the NWFD**

Region	SMT	Strengths	Prospects
Murmansk Region	Olenegorsk	Availability of mineral resources (iron ore); proximity to scientific base in Apatity; presence of the full-cycle Olenegorsk Mechanical Plant	Extraction of rare earth elements from sludge dumps for use in metallurgy, chemistry, and electronics manufacturing; research and production cooperation with the Kola Science Center RAS (Apatity); expansion of the client base for the Olenegorsk Mechanical Plant
	Kirovsk	Availability of mineral resources (apatite-nepheline ores); proximity to scientific base in Apatity; presence of a ski resort	Extraction of rare earth elements from sludge dumps for use in metallurgy, chemistry, and electronics manufacturing; research and production cooperation with the Kola Science Center RAS (Apatity); sports event tourism; development of the Kirovsk-Apatity agglomeration
Republic of Karelia	Kostomuksha	Presence of two large enterprises that are part of vertically integrated companies (Severstal and Segezha Group); proximity to the Kostomuksha Nature Reserve	Implementation of urban development projects funded by Severstal and Segezha Group as part of their corporate social responsibility policies; industrial and ecotourism
Komi Republic	Inta	Proximity to the Parnokskoye iron-manganese deposit; presence of an enterprise mining a quartz deposit (Zhelanninskoye quartz vein field); presence of a branch of the Vorkuta Arctic Mining and Polytechnic College (VAMPC)	Development of the Parnokskoye deposit site with manganese ores for the chemical and metallurgical industries; creation of an enterprise for quartz processing and manufacturing electronics and fiber-optic cables; introduction of training programs for mine surveyors and geologists/exploration specialists at the Inta branch of VAMPC
	Komi Republic	Proximity to the Yugyd Va National Park; presence of active and inactive mines	Extraction of methane from the Vorgashorskaya mine for subsequent use in diamond synthesis or energy generation; creation of enterprises for synthetic diamond production for industrial and jewelry use; development of stalker tourism and ecotourism
Source: own compilation.			

town of Apatity, particularly in the areas of research and production collaboration. Apatity is home to several specialized institutes of the Kola Science Center of the Russian Academy of Sciences (the Geological Institute, the Mining Institute, the I.V. Tananaev Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials, and the Institute of North Industrial Ecology Problems), whose innovative proposals could be applied at active mining deposits and processing enterprises. They could also prove useful in processing production waste (e.g., phosphogypsum, fly

ash, red mud, etc.) for the extraction of rare earth elements.

Near the town of Inta, on the western slope of the Urals, a promising manganese deposit has been discovered, which, after processing, can be used in many industries, including electronics, chemicals, construction, and optics.

Given that the number of workers in the mining industry of the Komi Republic is declining overall (from 33,700 in 2010 to 21,800 in 2023<sup>9</sup>), due not only to migration and natural population decline but also to earlier retirement, we consider it advisable to introduce a training

<sup>9</sup> Statistical Yearbook of the Komi Republic. 2024: Statistical collection. Komistat. Syktyvkar, 2024. 328 p.

program for geologists and exploration specialists in addition to the existing program in “Underground Mining of Mineral Deposits” at the Inta branch of the Vorkuta Arctic Mining and Polytechnic College (VAMPC).

In the town of Kostomuksha, the woodworking enterprise Karelian Wood Company LLC, which is part of Segezha Group and specializes in logging and primary wood processing, and JSC Karelsky Okatysh, part of Severstal, are located. Both vertically integrated companies pursue corporate social responsibility policies, which involve implementing social and environmental projects in the towns where they operate. Therefore, city administrations should focus on developing the business environment and maintaining cooperation with these enterprises.

Furthermore, it is worth noting that the Kostomuksha Nature Reserve is located near the town and could serve as a site for ecotourism.

In Vorkuta, given the abundance of carbon resources, we believe it is advisable to establish synthetic diamond production facilities. The mines in Vorkuta have high methane content; therefore, it would be prudent to explore the possibility of extracting methane from them and subsequently using it as a raw material for diamond production (Podmarkov et al., 1997; Lebedeva, Jiang Dan, 2025).

Furthermore, considering the large number of abandoned houses and two abolished settlements (Yur-Shor and Promyshlenny) near Vorkuta, which attract stalker tourists, it would be logical to organize such stalker tourism in a structured way. This would help reduce the number of potential accidents and incidents of looting (Lebedeva, Jiang Dan, 2025).

### **Conclusion**

Thus, the issues of development of small and medium-sized towns in Russia remain highly relevant today. In the face of new challenges, the development problems of such towns, especially

those specializing in mineral extraction, become even more acute, requiring measures to enhance the economic potential of SMTs.

The study has identified common problems characteristic of small and medium-sized mining towns in the NWFD (population decline, undiversified economies). For some of these towns, considering their specific strengths, corresponding promising types of economic activity have been proposed with a view to transforming them into growth poles.

However, in addition to differentiated recommendations for developing promising directions to turn mining SMTs into growth poles, general recommendations can also be formulated:

1) develop infrastructure, particularly by maintaining roads and railways in proper condition;

2) improve the institutional environment, especially local self-government institutions, to address issues of urban improvement, education and healthcare, enhance the quality of life for the population, and develop the territory as a whole;

3) create conditions for obtaining higher and secondary vocational education aligned with the specialization of key enterprises in the town by opening branches of universities and colleges;

4) establish conditions for organizing leisure activities for the population (in most of the towns under consideration, leisure options are limited to the municipal cultural center).

In our view, these recommendations will enable small and medium-sized mining towns to more quickly overcome their development challenges and, in the medium term, become growth poles for their regions.

The scientific novelty of the work lies in substantiating promising development directions for small and medium-sized mining towns based on commercializing the strengths

these towns possess. In the future, this will make it possible to diversify the economies of such towns, thereby increasing their resilience to various challenges and addressing a number of problems, such as population decline, significant infrastructure deterioration, and

reduced economic activity. The practical significance of the research lies in the potential for regional and local authorities to use the results when developing tools for the economic development of small and medium-sized mining towns.

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**Лебедева М.А.**

## ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ ТРАНСФОРМАЦИИ ДОБЫВАЮЩИХ МАЛЫХ И СРЕДНИХ ГОРОДОВ В ПОЛЮСА РОСТА РЕГИОНАЛЬНОГО УРОВНЯ (НА ПРИМЕРЕ СЗФО)

*Проблематика развития малых и средних городов России была и остается актуальной. Особого внимания заслуживают добывающие малые и средние города. В советское время наблюдался пик их развития, однако сейчас они частично утратили потенциал, а некоторые из них находятся в кризисном состоянии. Цель исследования – разработать практические рекомендации по трансформации добывающих малых и средних городов в полюса роста регионального уровня с учетом их социально-экономической специфики и ключевых факторов развития. На основе анализа научной литературы было установлено, что ключевыми факторами становления полюсов роста являются учет имеющегося совокупного экономического потенциала, развитые инженерная, коммерческая инфраструктура и институциональная среда, достаточный уровень финансирования. На примере Северо-Западного федерального округа выявлены общие проблемы добывающих малых и средних городов: недиверсифицированность экономики; сокращение объема инвестиций (Инта и Воркута); снижение численности населения; сложные природно-климатические условия в силу размещения городов на Крайнем Севере и местностях, приравненных к нему. Предложены направления трансформации экономики для некоторых городов: разработка альтернативных месторождений, извлечение редкоземельных элементов из отвалов месторождений, научно-производственная кооперация, открытие новых направлений подготовки кадров в учреждениях высшего и среднего специального образования; даны общие рекомендации по созданию условий для трансформации экономики в полюса роста регионального уровня. Научная новизна работы состоит в обосновании перспективных направлений развития добывающих малых и средних городов на основе коммерциализации имеющихся у них сильных сторон. Материалы статьи могут быть полезны органам местного самоуправления добывающих малых и средних городов и органам государственной власти регионального уровня для разработки политики развития городов подобного типа и прилегающих к ним территорий.*

*Полюса роста, добывающие города, малые и средние города, трансформация экономики, пространственное развитие.*

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