

## SCTCMG 2019

### International Scientific Conference Social and Cultural Transformations in the Context of Modern Globalism

#### HIGH-QUALITY REPRODUCTION OF LABOR POTENTIAL OF ARCTIC TERRITORIES: MIGRATION FACTOR

Elena Korchak (a)\*, Natalia Serova (a)

\*Corresponding author

(a) Luzin Institute for Economic Studies, Federal Research Center Kola Science Center of the Russian Academy of Sciences, 24a, Fersman Str., Apatity, Russia, [korchak@iep.kolasc.net.ru](mailto:korchak@iep.kolasc.net.ru), 89113207723

#### *Abstract*

The article is devoted to the role of migration factor in the processes of high-quality reproduction of labor potential of the Arctic territories of the Russian Federation. The authors of this study assumed the fact that in the current stage of implementation of Russia's state policy on the development of natural resources of the Arctic, labor potential is a key element ensuring geopolitical and economic interests of our state in this macro-region. Currently, the strategic documents defining the direction of the Arctic development in the framework of state policy of Russia outline the importance of the infrastructure and production aspects of territorial development. At the same time, the human factor is shifted back and deformation of processes of high-quality reproduction of the labor potential of the country's Arctic territories jeopardizes the achievement of strategic goals and objectives of the Russian state policy in the Arctic. The direction of migration movements was especially noticeable in the Murmansk region, therefore, the article assessed the impact of migration factor on the qualitative reproduction of labor potential of this region. We defined a specific character of migration processes in the Murmansk region, which is expressed in a high proportion in the migration flows of men of working age and the migration outflow of labor resources most of which are specialists with higher and secondary vocational education. It was determined that the migration factor plays an extremely negative role in the processes of qualitative reproduction of the labor potential of the Murmansk region.

© 2019 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Arctic zone of the Russian Federation, Murmansk region, migration, labor potential.



## 1. Introduction

As a result of rapid industrial development of the Arctic territories of Russia in the 20<sup>th</sup> century a permanent resident Arctic population was formed here, including a significant labor potential. However, with the collapse of the USSR and the subsequent deterioration of social and economic situation in the country the state's interest in the Arctic has declined significantly. In 1998-2000, the authorities attempted to implement the state Arctic policy (for example, the draft law "On the Arctic zone of the Russian Federation" and the first edition of the "Fundamentals of the state policy of Russia in the Arctic" were developed); however, they were not crowned with success.

The competition that has developed in recent years between the industrially developed countries for the development of the natural resources of the Arctic marked the beginning of the next stage of Russia's state policy for the development of its Arctic territories. The provisions of this fundamentally new policy were laid down in a number of strategic documents ("Basics of Russian state policy in the Arctic for the period up to 2020 and beyond", "Strategy for the development of the Arctic zone of the Russian Federation and ensuring national security"), which have identified key priority of the Russia's policy in the Arctic, i.e. the transformation of the Arctic territories into the leading resource base of the country.

Obviously, this large-scale task is inextricably linked with the need to regulate the processes of high-quality reproduction of labor potential since it ensures the effectiveness of the implementation of the Arctic direction of Russia's state policy. The particular relevance of this aspect is determined by the low degree of efficiency in the use of labor potential, as evidenced by social tensions in the local labor markets, i.e. big difference regarding unemployment and material well-being of the population within territories.

## 2. Problem Statement

The state policy in the field of regulation of the processes of high-quality reproduction of the labor potential of the Arctic territories had been carried out throughout the Soviet period. The inflow of labor resources into the Russian Arctic was provided mainly through the recruitment of graduates by industrial enterprises and through organized labor mobility (an example of which is the development of virgin lands, Komsomol construction projects), and also through the introduction of a regional wage regulation system (Ivanova & Klyukina, 2017; Timoshenko, 2013). However, the collapse of the centralized Soviet system produced a significant increase in social tensions in the Arctic labor markets and, in fact, the collapse of the social infrastructure (Laruelle, 2011; Sukneva, 2013; Samarina, Skufina, & Samarin, 2018), which led to mass migration to the southern regions. It should be noted that the direction of migration movements, which resulted in the reduction of labor potential was particularly noticeable in that period for the Murmansk region.

Today, the downward trend in the population of the Russian Arctic continues. In the period from 2002 to 2016, the population in the regions of the Russian Arctic had decreased by more than 96 thousand people (more than 6.5%). Amid the decline in the number of the Arctic working-age population, which was more than 20%, the demographic equilibrium shifted towards an increase in the number of population above working age by almost 15%. In general, according to expert estimates the Arctic regions, in particular the

Murmansk region will begin to experience a shortage of labor resources in the coming years (Ivanova & Klyukina, 2017).

### **3. Research Questions**

The relevance of studying the influence of the migration factor on the qualitative reproduction of labor potential of the regions of the Russian Arctic sector is dictated by the need to ensure the implementation of the strategic priorities of Russia's state policy on the development and development of the Arctic territories by human resources. Based on the example of the Murmansk region, the role of the migration factor in the processes of high-quality reproduction of labor potential in the Arctic will be determined.

### **4. Purpose of the Study**

The aim of the study is to assess the impact of the migration factor on the qualitative reproduction of the labor potential of the Murmansk region.

### **5. Research Methods**

Theoretically the study was based on the works of leading foreign and domestic economic scientists in the field of high-quality reproduction of the labor potential of the Arctic territories. The analysis of migration processes that have an impact on general changes in population and labor potential of foreign Arctic territories is considered in the works of Hamilton, Wirsing, and Saito (2018), Heleniak (2014), Howe (2009), Schmidt, Aanesen, Klovov, Khrutshev, and Hausner (2015). Similar studies concerning the Arctic territories of Russia are reflected in the works of Kiseleva and Gokova (2016), Fauser (2014), Laruelle (2011) et al. Complex issues of providing labor resources to the regions of the Russian sector of the Arctic, as well as the development of labor potential and forecasting the labor resources needs of the Arctic territories are highlighted in the works of Zaikov, Kondratov, Kudryashova, and Tamitsky (2018), Korchak and Korchak (2012), Matveev (2013), Revich et al. (2016). A retrospective analysis of the development of labor resources of the Murmansk region is presented in the works of Belyaev, Belevskikh, and Bakhtina (2016), Ivanova and Klyukina (2017), Skufina, Baranov, and Samarina (2018). It should be noted that currently there is an objective need to establish a scientifically substantiated position regarding the prospects for the qualitative reproduction of labor potential of the Arctic territories as part of implementation of Russia's national interests in the Arctic, taking into account the influence of migration factor.

The information base was the official statistical data of the Federal State Statistics Service, which characterize the social and economic situation of the Murmansk region and its municipalities, as well as the results of scientific research conducted in Kola Scientific Center of the Russian Academy of Sciences, including authors' participation. In particular, there were used the results of long-term monitoring studies of the Sociological Research Sector under the guidance of Gushchina, Kondratovich, Polozhentseva, and Yakovchuk (2016) (annual monitoring of social and economic situation in the Murmansk region,

monitoring of the economic situation and social well-being of residents of single-industry cities of the Far North, monitoring of the processes of social sustainability in the Murmansk region, etc.). For example, the results of the last (2013-2016) sociological studies of the migratory attitudes of the population of the Murmansk region showed that almost 70% of inhabitants associate their further life with the region of their residence. To a certain extent, this alignment of opinions is explained by the fact that over 60% of respondents indicated that they have been living in the region since their birth. The impetus for a positive perception of the development prospects of the region, starting 2014, according to the respondents, was the interest demonstrated by government in the Russian Arctic and the expectation of implementation of declared intentions about its development prospects.

## 6. Findings

The Murmansk region is a highly urbanized region (about 93% of the total population lives in urban-type settlements), which is part of the Arctic and has a well-developed production and social infrastructure with relatively high population density compared to other Arctic regions of Russia (5.19 people/km<sup>2</sup>). The settlement system, including Closed Administrative Territorial Unit (CATU) and military facilities, one-company towns, remote and inaccessible rural settlements, and differences in the structure of the economy of municipalities constitute the main factors of inequality in the distribution structure of the working population. This statement is particularly relevant due to the fact that the territorial specific character of the region determines the disparity between the demand and supply of labor, the differentiation of municipalities of the region according to the levels of unemployment and wages and, ultimately, the able-bodied population as a basis in the processes of development of highly-qualified labor potential.

A special group of municipalities of the Murmansk region consists of non-diversified settlements. Among the main problems of social and economic development, besides the dependence on the state of the city-forming enterprises, it is also possible to single out the decline in population due to the migration loss. At the same time, the migratory attitudes of local residents affect the sectoral differentiation of workers in terms of wages and salaries (for example, the average monthly wage ratio to the subsistence minimum of the working-age population in the Zapolyarny city is 3.97 times; in the non-diversified settlement Nickel it amounts to 2.96).

The ambiguity of the situation in non-diversified settlements of the region is also confirmed by sociological research, (Gushchina et al., 2016). Thus, monitoring the social well-being of people living in the region's single-industry towns through assessing the economic situation and determining the degree of satisfaction of their own interests in the economic, political, social and cultural fields indicates low (compared with the estimates of other settlements) assessments of material well-being, as well as satisfaction with work and income. According to the residents of non-diversified settlements, the presence of a city-forming enterprise impedes the growth and diversification of economic activity of population and, accordingly, the development of such settlements as self-developing territorial entities. Moreover, the population of non-diversified settlements is dominated by the tendency to lower estimates of social development and to lower their own adaptation resource, which indicates an insufficient degree of social responsibility of city-forming enterprise and largely dispels the myth of well-being of population of non-diversified settlements (Gushchina et al., 2016; Ivanova & Klyukina, 2017).

Another group of municipalities of the Murmansk region is rural settlements, the vulnerability of which is determined by focal development, a steady trend of population decline and, as a result, desertion and neglect. The territorial remoteness and underdevelopment of transport infrastructure of such settlements (Krasnoshchelje, Sosnovka, etc.), as well as the specific features of economic activities in the countryside, are the main factors that subsidize local budgets, bad condition of housing facilities, information and communication exclusion, high unemployment rate and poverty. In particular, with the average regional level of 1.4% the level of unemployment in the Tersky region is 9%, and in Lovozero is 5.2%.

The situation is aggravated by the fact that the model of local self-government (Serova, 2015) in the rural areas does not effectively address the issues of local importance, such as the organization of resources, collection and removal of household waste, library services, conditions for mass recreation and the provision of transport services, maintenance of housing, land control, etc. (Pronina, 2014). A vivid example of the above situation is Teriberka village. First, the development problems of Teriberka are typical for small coastal arctic settlements, i.e. about 30% of the population is above working age and the overall unemployment rate is almost 60%. Secondly, due to unfavorable natural and climatic conditions and focal population in winter periods, the motor transport communication with the regional and district centers and the supply of essential goods are blocked here. Thirdly, as a result of changes introduced in the organizational and economic mechanism of social area and engineering infrastructure in the last decade the availability of social services for the population has decreased. The final line of this situation is social tensions in the local labor market, the spread of economic poverty and, in fact, the degradation of labor potential.

A special role in the processes of qualitative reproduction of the labor potential of the Murmansk region is played by the migration factor. The migration decline is observed today in all municipalities of the region: the smallest is in the single-industry cities such as Monchegorsk, Olenegorsk and Polyarnye Zori, the largest is in the Pechenga, Kovdorsky and Tersky districts. In the Pechenga district the high level of migration loss of the population is mainly due to the optimization of the number of military settlements and relocation of families of servicemen to other regions. In addition, the population of the area migrates to the nearby northern provinces of Sweden, Norway and Finland, which are experiencing a demand for highly qualified professional personnel and possessing an attractive level of material well-being. Among the main reasons for a high level of migration loss of the able-bodied population in the Terek and Kovdorsky districts is a high level of social tension in local labor markets, caused by the unstable economic situation and insignificant economic activities regarding production.

The following specific features of the migration processes have a negative impact of the migration factor on the processes of high-quality reproduction of labor potential. The specific feature of socio-demographic structure of regional labor migration is a high share of migration flows of men of working age. In the total number of migrants, over 60% are the citizens of working age (those who came in are mostly aged 20-24 and those who left are aged 30-39). The Murmansk region loses highly qualified personnel along with the able-bodied population in the migration flows. Thus, in the Kovdorsky District, more than 55% of the migration loss is the citizens at the age of 15–29 years old; about 40% among traveling citizens of the working age are the citizens with higher professional education. In the Kolsky District, the migration turnover is comprised of 79% of the working-age population, of which 50% have a higher

professional education and more than 16% have a secondary vocational education. In general, in 2016, as part of the migration flows in the Murmansk region almost 50% were the citizens of working age, 8% were younger the working age (those who came in are mostly aged 20-24 and those who left are aged 30-39). Out of the total number of the migration flows of persons aged 14 and over 42.2% had a higher professional education and 16.4% had a secondary vocational education. This situation attests to the fact that the processes of qualitative reproduction of the labor potential of the region are subject to the negative influence of the migration factor.

## 7. Conclusion

Thus, the migration factor plays a negative role in the processes of high-quality reproduction of the labor potential of the Murmansk region. The main reason for this situation is the migration decline the specificity of social and demographic structure of which is expressed in a high share of migration flows of men of working age, as well as social and occupational one in the migration outflow of labor resources, most of which are specialists with higher and vocational education. Within the region, the high degree of intensity of the migration flows is due to current structure of local economies, the settlement system and the heterogeneity of social and economic situation of the settlements, in particular unemployment in local labor markets and the phenomenon of low-paid employment. The ambiguity of this situation is exacerbated by the ill-conceived policy of regional government bodies one of the main tasks of which in promoting employment is attracting additional labor resources under the conditions of high unemployment among young people. In 2016, 7.1% of unemployed were the citizens aged 15-19; 26.4% were the citizens aged 20-29. 40% of unemployed citizens did not have vocational education, while in the region the number of vacancies requiring a higher level of professional training and work experience has a constant upward trend.

By all means, the current situation as the main priority of the state policy of Russia on the territory of the Murmansk region as a subject of the Arctic puts forward the regulation of the processes of high-quality reproduction of the labor potential of the region. The main focus of such regulation is to meet the needs of local economies in the labor force involving people living in the region and adapted to the conditions of the Arctic, as well as creating conditions for the vocational guidance of young people and their active position in the territorial labor markets.

## Acknowledgments

The reported study was funded by RFBR according to the research project № 19-01-00022 «The impact of the pension reform on the economic development of the regions of the Arctic zone of the Russian Federation».

## References

- Belyaev, D. P., Belevskikh, T. V., & Bakhtina, A. G. (2016). Formation of labor resources in the North of Russia (on the example of the Murmansk region). *Economics and Management*, 2(136), 20–2.
- Fausser, V. V. (2014). The demographic potential of the northern regions of Russia is a factor and condition for the economic development of the Arctic. *Economy of the region*, 4, 69–81.
- Gushchina, I. A., Kondratovich, D. L., Polozhentseva, O. A., & Yakovchuk, A. A. (2016). Some aspects of

- social adaptation of the population of the Arctic region (according to the results of sociological research in the Murmansk region). *ITportal*, 4(12), 10.
- Hamilton, L., Wirsing, J., & Saito, K. (2018). Demographic variation and change in the Inuit Arctic. *Environmental Research Letters*, 13. <https://doi.org/10.1088/1748-9326/aae7ef>
- Heleniak, T. (2014). Arctic populations and migration. In *Arctic Human Development Report: Regional Processes and Global Linkages, Copenhagen, Nordic Council of Ministers* (pp. 53–104). <https://doi.org/10.6027/TN2014-567>
- Howe, L. (2009). Patterns of migration in Arctic Alaska. *Polar Geography*, 32(1–2), 69–89. <https://doi.org/10.1080/10889370903000422>
- Ivanova, M. V., & Klyukina, E. S. (2017). Modern preconditions for the future of the Arctic labor force. *Monitoring Public Opinion: Economic and Social Changes*, 6(142), 180–198. <https://doi.org/10.14515/monitoring.2017.6.08>
- Kiseleva, A. M., & Gokova, O. V. (2016). Demographic security of the northern regions: problems of depopulation and migration. *Bulletin of Omsk University. Economy series*, 4, 181–190.
- Korchak, A. D., & Korchak, E. A. (2012). The main characteristics of the well-being of the population of the Murmansk region in the light of institutional transformations of regional development. *North and the market: the formation of economic order*, 1(29), 62–67.
- Laruelle, M. (2011). The demographic challenges of Russia's Arctic. *Russian analytical digest*, 96, 8–10.
- Matveev, A. (2013). Problems of providing the North of Russia with labor resources: solutions. *Social Policy and Social Partnership*, 11, 5–13.
- Pronina, L. I. (2014). Improving the organization, economy and financing of local government. *Financial Bulletin: Finance, Taxes, Insurance, Accounting*, 7, 42–44.
- Revich, B. A., Kharkov, T. L., Kvasha, E. A., Bogoyavlensky, D. D., Korovkin, A. G., & Korolev, I. B. (2016). *Demographic processes, the dynamics of labor resources and the risks to the health of the population of the European part of the Arctic zone of Russia*. Moscow: Lenand.
- Samarina, V., Skufina, T., & Samarin, A. (2018). Russia's North Regions as Frontier Territories: Demographic Indicators and Management Features. *European Research Studies Journal*, 3, 705–716.
- Schmidt, J., Aanesen, M., Klovov, K., Khrutshev S., & Hausner, V. (2015). Demographic and economic disparities among Arctic regions. *Polar Geography*, 38, 251–270. <https://doi.org/10.1080/1088937X.2015.1065926>
- Selin, V. S., Vasin, F. D., & Segeev, T. R. (2013). *Regional Economics and Issues of North*. Apatity: KSC RAS.
- Serova, N. (2015). Analysis of the transformation of elections of heads of the Murmansk region municipalities. *Public administration issues*, 1, 186–196.
- Skufina, T., Baranov, S., & Samarina, V. (2018). Differentiation of Socio-economic Environment as Factors of Regional Development (The Case Study of Murmansk Region, Russia). *Advanced Science Letters*, 9, 6329–6331. <https://doi.org/10.1166/asl.2018.13045>
- Sukneva, S. A. (2013). Arctic zone of the North-East of Russia: problems of demographic development. *Regional Economics: Theory and Practice*, 25, 13–16.
- Timoshenko, A. I. (2013). Soviet experience in the development of the Arctic and the Northern Sea Route: the formation of a mobilization economy. *Historical and economic research*, 1–2, 73–95.
- Zaikov, K. S., Kondratov, N. A., Kudryashova, E. V., & Tamitsky, A. M. (2018). The need for labor resources of the subjects of the Arctic zone of the Russian Federation. *Economic and social changes: facts, trends, forecast*, 11(6), 184–201. <https://doi.org/10.15838/esc.2018.6.60.11>