Directions and Prerequisites for the Outflow of Youth from the Arctic Zone of Russian Federation

Andrey Shelomentsev  
Department for the study of regional socio-economic systems  
Institute of economics, the Ural branch of Russian Academy of Sciences  
Ekaterinburg, Russia  
ORCID: 0000-0003-1904-9587

Lyudmila V. Voronina  
Institute for integrated arctic studies, Laboratory of socio-ecological and economic systems  
Laverov Federal Center for Integrated Arctic Research, RAS  
Arkhangelsk, Russia  
ORCID: 0000-0003-3607-0687

Anna Ukhanova  
Institute for integrated arctic studies, Laboratory of socio-ecological and economic systems  
Laverov Federal Center for Integrated Arctic Research, RAS  
Arkhangelsk, Russia  
ORCID: 0000-0001-9083-9931

Elena Smirennikova  
Institute for integrated arctic studies, Laboratory of socio-ecological and economic systems  
Laverov Federal Center for Integrated Arctic Research, RAS  
Arkhangelsk, Russia  
ORCID: 0000-0001-7733-4285

Abstract—The article is devoted to the study of prerequisites and directions of the outflow of youth from the country’s Arctic territories. Based on the data from the interviews in 2019, it was determined that educational migration has recently become one of the main factors of the outflow of young people from the Arctic municipalities. The lack of higher education institutions in the autonomous Arctic regions forces young people to leave the territory in order to obtain a higher level of education. The presence of existing leading universities in the territory does not solve the problem of outflow of youth, which is associated with the quality of education, the choice of areas of training and further professional implementation. As a result of the study, it was determined that the goal for departure from the Arctic territories is formed in childhood and strengthens over the years. The results can be used by state authorities, educational and scientific institutions in solving problematic issues in the field of youth education and migration in the Russian Arctic.

Keywords—population outflow, youth, education, Arctic zone of the Russian Federation.

I. INTRODUCTION

Over the past ten years, population in the Arctic of different countries has decreased significantly, which, according to researchers, is mainly due to migration processes. Schmidt J.I., Aanesen M., Klokov K.B., Khrushchev S., Haunser V.H. note that in general, the Arctic has experienced a migration outflow, only Iceland and two regions in Canada can be characterized by a positive migration inflow [1]. There is still a rapid outflow of population from the Russian Arctic regions. The reasons for the population’s departure from the Russian Arctic are various, including housing problems [2], high unemployment [3], industrial closure [4], reduced effectiveness of the guarantee payment system in the North [5], unattractive living and working conditions [6] and others. It is worth noting that these issues concern mainly the working-age population. However, a very young population, having received only basic general or complete secondary education, is actively leaving the Arctic territories. The main reason for the negative trend in recent years is the lack of professional and higher educational institutions in the Arctic territories, especially in rural areas. Consequently, young people are deprived of the opportunity to increase their level of education and gain a particular profession.

The leading universities of Russia mainly carry out scientific and educational activities in the Arctic territory: Northern (Arctic) Federal University named after M.V. Lomonosov, Murmansk Arctic State University, Norilsk State Industrial Institute, as well as branches of several universities in Moscow and St. Petersburg. However, despite this, young people are rapidly leaving even relatively large Arctic cities (by northern standards) for educational purposes. This trend can be observed in almost all the northern and arctic regions of Russia. In this regard, there is a need to identify the prerequisites for the educational migration of young people from the Arctic territories of the country, which determined the relevance of this study.

II. LITERATURE REVIEW

A significant amount of work by foreign and domestic researchers is devoted to the study of factors of population migration in the Arctic territories. As a comparative analysis of scientific research in the Arctic shows, the reasons for the arrival and departure of the population are differentiated by territory. For example, Hamilton L.C., Saito K., Loring P.A., Richard B., Lammers R.B., Henry P., Huntington H.P. called the climate change as the main factor in the migration movement of the population in Alaska, that is, people living in this territory are forced to leave [7].

In the last decade, the attention of state authorities of the Russian Federation has been riveted to the development of the country’s Arctic territories. The Russian Arctic has been characterized by a systematic outflow of population for more than twenty years [8]. At present, reducing the scale of migration outflows is one of the tasks of state policy in terms of maintaining and effectively realizing the demographic potential [9]. The influence of various factors on the decision of the population to leave the Arctic territories is described in various scientific studies. So, for example, Druzhinina I.V., Kurushina E.V., Kurushina V.A. revealed that the provision of new housing and social infrastructure for the population is important for all migrants in the North and in the Arctic [10]. Karmakulova A.V., Grigorishchin A.V. noted that the investments’ inflows, as well as the purchasing power and unemployment rate in the territory, affect the migration.
In the Arkhangelsk and Murmansk regions, the majority of respondents note that, as a rule, “the best ones, with Unified State Exam scores close to 300” leave the region and apply mainly for the “most prestigious universities”. Young people indicate the diversity of higher education institutions and the presence of specialties that they do not have in the regions, in particular military universities. There is an established opinion among teenagers in 10th-11th school grades that it will be easier to find work and more opportunities for self-realization in general after graduation in Moscow and St. Petersburg. Young people are not satisfied with the arrangement of territories, the high cost of real estate, which is comparable to the prices of St. Petersburg. In addition, the respondents of the Arkhangelsk region and the Republic of Karelia note that public opinion has a high influence on the decision of youth to leave to study in St. Petersburg or Moscow, that “the level of education in these cities is higher”.

In the Arctic territory of the Krasnoyarsk Territory, there is only one higher educational institution in the city of Norilsk, which is focused on the mining industry. There are also secondary vocational schools, but mostly specialists are trained to work in the mining and metallurgical company Norilsk Nickel. Consequently, in the Arctic municipalities of the Krasnoyarsk Territory there is no diversification of specialties, which forces young people to migrate for educational purposes to other regions. “Initially, some of the young people are going to return, but in the end, as a rule, they arrange their lives in other cities, including those where there are relatives and friends”. Respondents indicate that “for most young people, parents have housing outside of Norilsk, where they strive to leave”. If young people decide to stay to study in Norilsk, then later there are difficulties with suitable work outside the city, since the specialties acquired have certain specificity. In this regard, young people strive to get professions that are in demand not only in Norilsk, but also in other regions, so that even when they return they have the opportunity to leave.

According to the results of the author’s interview, it was revealed that the young population of the Sakha Republic (Yakutia) mainly seeks to stay in the region, even if they went abroad during education. The part of the youth who expressed a desire to leave the Republic, points out as the main reasons for the underdeveloped infrastructure, remoteness from the central regions of the country and low quality of life in the Arctic and Arctic regions.

Table I shows the directions of educational migration of youth from the Arctic zone of the Russian Federation.

As a rule, the territorial factor and the transport accessibility of higher and secondary vocational educational institutions have a significant impact on the decision regarding education.

An analysis of the table allows us to conclude that young people in the European part of the Russian Arctic most often choose higher education institutions of St. Petersburg, Moscow, Yaroslavl, Vologda, Kaliningrad to study undergraduate and graduate programs and, as a rule, focus on technical specialties.
Higher educational institutions are completely absent in the Arctic Autonomous Okrugs, which is the main reason for youth to leave, and therefore forced educational migration is forming in these territories.

So, young people of the Nenets Autonomous Okrug move to Arkhangelsk to get higher education at the Northern (Arctic) Federal University named after M.V. Lomonosov and in various higher institutions of St. Petersburg. The priorities among the young population of the Yamalo-Nenets Autonomous Okrug are educational institutions in the capital cities, as well as in Tyumen and Ekaterinburg. For higher education, the youth of the Chukotka Autonomous Okrug mainly choose the North-Eastern Federal University named after M.K. Ammosov in the city of Yakutsk.

### Table I. Directions of Educational Migration of Youth from the Arctic Zone of the Russian Federation

<table>
<thead>
<tr>
<th>Departure Region</th>
<th>Preferable country/city for education</th>
<th>Preferable higher education institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of Karelia</td>
<td>Finland, Czech Republic, St. Petersburg</td>
<td>St. Petersburg Polytechnic University of Peter the Great</td>
</tr>
<tr>
<td>Komi Republic</td>
<td>St. Petersburg, Vologda</td>
<td>Aerospace Instrumentation Plekhanov Russian University of Economics, St. Petersburg State University of Marine Technical University</td>
</tr>
<tr>
<td>Arkhangelsk region</td>
<td>Moscow, St. Petersburg, Yaroslavl, Vologda, Kaliningrad</td>
<td>Bauman Moscow State Technical University, St. Petersburg State University of Architecture and Civil Engineering, Yaroslavl State Technical University</td>
</tr>
<tr>
<td>Nenets Autonomous Okrug</td>
<td>Arkhangelsk, St. Petersburg</td>
<td>Murmansk region</td>
</tr>
<tr>
<td>Murmansk region</td>
<td>Moscow, St. Petersburg, Petrozavodsk</td>
<td>Moscow Institute of Physics and Technology (State University) State University of Management</td>
</tr>
<tr>
<td>Yamal-Nenets Autonomous Okrug</td>
<td>Tyumen, Moscow, St. Petersburg, Yekaterinburg</td>
<td>Tyumen University (former Tyumen State Oil and Gas University), Novosibirsk State University of National State University</td>
</tr>
<tr>
<td>Krasnoyarsk Krai</td>
<td>Moscow, St. Petersburg, Krasnoyarsk, Novosibirsk, Ivanovo, Belgorod, Ufa, Tula, Samara, Izhevsk</td>
<td>St. Petersburg State University of Aerospace Instrumentation Krasnoyarsk State Medical University, Novosibirsk State University of Architecture and Civil Engineering Ivanovo State Power University Belgorod State Technical University Belgorod State Institute of Arts and Culture The All-Russian State University of Justice — Izhevsk branch, Siberian Federal University</td>
</tr>
<tr>
<td>Sakha (Yakutia)</td>
<td>Moscow, Novosibirsk, Abroad - China, Canada, South Korea</td>
<td>North-Eastern Federal University, Siberian Federal University</td>
</tr>
<tr>
<td>Chukotka Autonomous Okrug</td>
<td>Yakutsk</td>
<td>Chukotka Autonomous Okrug</td>
</tr>
</tbody>
</table>

The following conclusions can be made. First of all, educational migration in recent decades has become one of the main factors in the outflow of young people from the Arctic territories of Russia. Secondly, the goal for departure from the Arctic territories is formed in childhood and only intensifies over the years. Thirdly, the presence of leading universities in the territory as a whole does not solve the problem of the outflow of youth, since young people make demands on the education quality, the opportunities of missing training areas and further professional implementation, the possibilities of which are quite limited in cities remote from the country’s central part.

**VI. CONCLUSION**

The practical significance of the study lies in the possibility of applying the results obtained by state authorities in the field of regulating issues of population migration from the Arctic regions of the country, mainly young people and of working age, as well as in the field of educational development. The results can also be applied in institutions of higher and additional education in the framework of disciplines aimed at studying the Arctic and northern territories, demographic and migration policies. Research organizations can apply the results to the development of theoretical, methodological and methodical approaches to preserving the demographic potential, reducing the migration outflow of the population in the Russian Arctic.