How Intraregional Migration Affects Human Capital in Northern Regions

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Abstract. The paper dwells upon the theory and methodology of researching the effects of migration on human resources (human capital) in the development of northern regions. It presents the main trends of migration in Russia. The author hereof analyzes international and Russian experience of using rotational jobs for the industrial development of the Far North. They further analyze how migration affects the regional human resources in the Far East and in the Republic of Sakha (Yakutia). The paper summarizes the sociological study of seasonal intraregional migration of local workers due to job rotations at AO Almazy Anabara. It further uses evidence from the Republic of Sakha (Yakutia) to explain why seasonal intraregional migration is a must for human capital development in the labor market created by the industrial development of northern regions.

1. Introduction
The Russian Federation’s effective Arctic policy is to expand the resource base, to upgrade and advance the local economy on a large scale. More than 20 major investment projects have been planned for the Arctic; they will help develop the local oil and gas pipelines, transport and energy. Such projects need a considerable influx of high-skill professional to the Arctic; these will only come if the local social and labor conditions are attractive, and the human development in the region is high enough. Human capital is defined herein as the entirety of intellectual skills, knowledge, professional competencies, motivations, morals and ethics a human person acquires by means of their education and work. It is referred to as ‘capital’ because acquiring it is essentially an investment that a person can make returns on as long as they work; the return on this investment takes form of continually increasing income. [4, p. 637–642].

2. Relevance, scientific significance, and state-of-the-art
What makes the research topic relevant is that the industrial development of northern regions, particularly in the Far East, will create multiple jobs before and after 2025, which will have to be covered. The region’s population is scarce, as able-bodied and high-skilled workers continue to migrate to Central Russia; natural population growth is low, and the migration net is negative. Meanwhile, the region has to address its labor market problems: both lack of staff for newly developed industrial sites, and the rising unemployment rates.

Russia’s Migration Policy Concept for Until 2025 (‘the Concept’) notes the importance of migration to the country’s socioeconomic and demographic trends. Russia’s public migration policy seeks, among other things, to facilitate internal migration by developing temporary migration for
Although rotational jobs have been in place for more than 40 years here, they still do not constitute a sufficiently visible part of the local industry, as data available on rotational jobs leaves much to be desired; this, in turn, jeopardizes any attempt to assess how efficient seasonal internal migration is in the regional labor market. Besides, interregional internal migration of workers is more prominent, while the local population remains largely uninvolved in the development of northern regions. Let us consider the state of the art in related research. Russian scientists have been researching the labor market created by the industrial development of northern regions since the mid-20th century. Known papers were written by research teams of Siberian and Far Eastern branches of the Russian Academy of Sciences, as well as by the Republic of Sakha’s Academy of Sciences. As far back as in the 1970s, Academician I.Ye. Tomsky studied the socioeconomic problems facing indigenous peoples due to the industrial development of northern areas in Yakutia and Krasnoyarsk Krai; he noted that local workers desperately needed special training [19, pp. 77–78]. Tomsky raised the question of providing these peoples with jobs in the context of switching to market economy [14]. Notably, basic labor market analysis concepts must be analyzed with due consideration of how difficult it might be to assess human potential in the labor market; workforce availability depends on demography first and foremost [20, p.23]. Factors driving people to leave the Republic as the country was transitioning to a market economy were covered in detail in [21, pp. 151–165]. G.S. Vechkanov considered the intraregional distribution of workforce and noted that the influx/outflux of workers cannot be termed definitely positive or negative without considering whether this or that location in the region lacks, or has surplus of, workforce [6, p.101]. G.A. Zheleznova studied the development and regulation of migration in Yakutia over a long timeframe: from the 1940s to date [12, pp. 135–153]. Regional specifics of social life and labor in Yakutia was studied by A.K. Akimov and F.S. Tumusov; G.V. Tolstykh researched the history of industrial working conditions [17]. The emergence of labor market and the key areas of public policy applicable to the labor markets in Northern Russia were addressed by Kh.N. Dyakonov [7]. A.A. Popov notes that the decline in local living standards, which constitute the key aspect of social security, exacerbates the region’s demographic problems [22, p. 418]. Municipalities and settlements in the North desperately need integrated development to tackle their hidden unemployment; for Popov, these problems also represent an opportunity to boost the local living standards with help from the state and major mining businesses [11, p. 417]. Y.T. Vasilyev proposed a differentiated and scientifically sound approach to migration policy tailored specifically to the industrial development of northern regions [4] Of interest is the distribution of migrants that arrived here in 1993 by the duration of stay. A majority of them (30.6%) lived in the Republic for 6 to 9 years; 24.4% stayed here for 2 to 5 years; and 15% stayed for less than 2 years. Thus, two-thirds of migrants did not stay in the locations of their destinations for 10 years or more [5, p. 83]. This further proves L.L. Rybakovsky’s claim that newcomers tend to be more mobile. However, as soon as in 1999 most of the migrants were those who had lived there fore more than 10 years, i.e. people who had adapted well to life and work in the Far North [18, pp. 19–20]. This indicated that the policy was ill-conceived, as it had forced the economically active demographics to emigrate.

3. Statement of problem
This research uses evidence from the Republic of Sakha (Yakutia) to explain why seasonal intraregional migration is a must for human capital development in the labor market created by the industrial development of northern regions.

To that end, it further seeks to:
1. Analyze the theory and methodology of researching the effects of migration on human resources (human capital) in the development of northern regions.
2. Identify the main trends of migration in Russia.
3. Consider the international and Russian experience of using rotational jobs for the industrial development of the Far North.
4. Analyze how migration affects the regional human resources in the Far East and in the Republic of Sakha (Yakutia).
5. Summarize the sociological study of seasonal intraregional migration of local workers due to job rotations at Almazy Anabar LLC.

The subject matter is the labor market created by the industrial development of northern regions, and the intraregional migration of local workers due to job rotations at AO Almazy Anabara.

It is herein hypothesized that migration has ever greater effects on the socioeconomic and demographic trends and patterns in the Russian Federation. For industrial development of northern regions, seasonal intraregional migration of the local workforce for job rotations is strongly advisable, as it helps boost the region’s human capital.

The author hereof uses general scientific methods to study the migration processes and the industrial development of northern regions; sociological methods such as surveying, expert surveys, interviews; and statistical methods in SPSS Statistics 17.0; besides, the paper also presents an overview of reference books, regulations, and primary statistics.

The theoretical framework builds upon Russian scientists’ papers on labor markets and demographic processes as well as on the challenges of socioeconomic development of newly industrially-developed northern areas. The regulatory framework is based on the concepts, legislative acts, and resolutions of the Russian Government and the Republican Government of Yakutia. The researcher uses the reports, regulatory documents and guidelines currently applicable to the country’s and the region’s labor market and migration policies. Empirical data for this research is sourced from the Federal State Statistics Service, the website of AO Almazy Anabara, and the survey of rotating workers taken in 2016–2017.

4. Theory

Human capital is fundamental to public production, while the spatial distribution of workforce is closely linked to migration trends. This is a complex demographic process, as people’s migration is affected by a variety of a ethnic, political, economic, and social factors [22, p. 197]. Migration is a chain of events resulting in a person changing their location of residence. Internal, or domestic migration is defined herein as movement within a single country from one settlement, administrative district, or economic/geographical area to another one. Internal migration is mainly either rural-to-urban migration or interdistrict migration. Temporary migration involves moving to a different location for a long but definite time, mostly for work. People often migrate temporarily to a different country or to a remote, unsettled area, e.g. under a multi-year contract. The Concept further clarifies that temporary migration does not invoke a new permanent residence [1]. Seasonal labor migration is defined in the Concept as the cross-border migration of foreign nationals that come for seasonal work that by definition may not be available year-round. Rybakovsky defines seasonal migration as the internal migration of the country’s nationals to a temporary work location, mainly for a few months, while retaining their permanent residence. On the one hand, such long-term commuting improves living standards; on the other hand, it helps cover the workforce deficits during active seasons. Intraregional seasonal migration of the local workforce for rotational jobs contributes to the migration-related acceleratory functions, whereby movement of persons affects their social and psychological traits, helps broaden their horizons and acquire knowledge of various aspects of life, share skills and experience, develop the personality and its tangible, social and spiritual needs, integrate national cultures, thus boosting the region’s human capital.

Practical Significance, Proposals and Implementation Results, Experimental Results
Currently, there are three types of migration in Russia: (1) emigration; (2) migration between ex-Soviet countries; (3) internal migration. The Russian Federation is facing the following migration issues:
– working-age population continues to immigrate from the CIS;
– ever more refugees arrive to the country’s South.
– people continue to leave the Far East, the North, and East Siberia.
Table 1. International migration to and from Russia, persons total.

<table>
<thead>
<tr>
<th>Year</th>
<th>Influx</th>
<th>Outflux</th>
<th>Net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>597,651</td>
<td>232,987</td>
<td>364,664</td>
</tr>
<tr>
<td>2000</td>
<td>359,330</td>
<td>145,720</td>
<td>213,610</td>
</tr>
<tr>
<td>2005</td>
<td>177,230</td>
<td>69,798</td>
<td>107,432</td>
</tr>
<tr>
<td>2010</td>
<td>191,656</td>
<td>33,578</td>
<td>158,078</td>
</tr>
<tr>
<td>2011</td>
<td>356,535</td>
<td>36,774</td>
<td>319,761</td>
</tr>
<tr>
<td>2015</td>
<td>598,617</td>
<td>353,233</td>
<td>245,384</td>
</tr>
<tr>
<td>2016</td>
<td>575,158</td>
<td>313,210</td>
<td>261,948</td>
</tr>
<tr>
<td>2017</td>
<td>589,033</td>
<td>377,155</td>
<td>211,878</td>
</tr>
<tr>
<td>2018</td>
<td>565,685</td>
<td>440,831</td>
<td>124,854</td>
</tr>
</tbody>
</table>

[Source: 27].

From 1997 to 2018, net migration followed a wave-shaped pattern. It peaked first due to skyrocketing immigration to Russia, mainly from the CIS. However, emigration from Russia peaked at the same time. The latter was mainly due to repatriation of non-Russian ethnic minority people. By 2005, net migration had become 3.4 times lower, i.e. the migration processes stabilized. Russia’s emerging economic growth led to greater investment in construction, which created multiple new jobs and caused a drastic increase in immigration from the CIS; in 2015, the immigration figures exceeded those of 1997. As noted in the Concept, every year Russia has 3 to 5 million foreign nationals working without permit. What exacerbates illegal and uncontrolled external migration is that newer generations of CIS migrants have worse professional training, education, and Russian language skills compared to their predecessors.

Over the past two decades, net migration compensated for natural population decline by more 50%. According to the Federal State Statistics Service’s projections of Russia’s population for until 2035 (the average growth scenario), which is based on the latest All-Russian Census and the demographic trends of recent years, Russia will have a population of 147.1 million people in early 2035; natural growth will still be negative, but net migration will remain stable at 285 thousand persons per annum. However, the country’s population is expected to age. This means the tax burden on the employed people will keep getting heavier to sustain retirees. Therefore, migration will be ever more important for Russia’s demographic and socioeconomic development.

Consider the challenges of labor market creation by the industrial development of northern regions; the challengers pertain to the high turnover of individual companies’ workforce due to migration. Prominent Russian demographist L.L. Rybakovsky notes that “today, while the long-settled areas gain more skilled workers that leave sparsely populated locations, emigration from the North, the Far East, etc. leaves them in decline demographics- and labor-wise. It has taken these people multiple generations to adapt to extreme climates. Whatever has been invested in bringing people there and training personnel specifically for those locations is being irretrievably lost.” [15] He believes that how sufficient the local workforce is depends on how stable the region is demographics-wise. In his opinion, permanent population comprises:

– the native population that has existed here for centuries, has historically adapted to the local conditions and tailored its economy to the local nature;
– locally-born adults of all generations and their children, i.e. the demographic that is mostly tightly bound to the location and has extensive kinship and property relations here. These people have adapted to the local conditions and are no longer connected to their or their parents’ place of origin;
– immigrants from other regions and their children that have lived here for at least ten years, which has rendered them similar to the local natives, i.e. somewhat less mobile than people in the long-settled locations.

Adults who have lived at a place for less than ten years and their children are referred to as newcomers. This demographic is not part of the permanent population and can be referred to as mobile demographic. It comprises two layers: a transitional layer (people who settled five to ten years ago) and a fluid layer (people who settled even more recently). A sample survey carried out by statistics agencies in 1994 showed 12.2% of Russia’s population were newcomers. Mobility was the highest in Yamalo-Nenets, Khanty-Mansi, Evenki, Koryak, and Chukchi Autonomous Okrugs. Thus, Russian northerners are the most mobile people in the country.
The general belief is that natives form the most permanent demographic of newly developed areas. As far back as in 1959, M.Ya. Sonin discussed the issues of settling in Siberia and the Far East; he wrote that ‘most stable human resources are the people who were born and raised in the easternmost areas [16, p. 161].

However, if the ‘newcomers’ were leaving the in the early 1990s as claimed by L.L. Rybakovsky, then as soon as in 1999 most of the migrants were those who had lived there for more than 10 years, i.e. people who had adapted well to life and work in the Far North [18, pp. 19–20]. Russia’s current public migration policy seeks, among other things, to facilitate internal migration by developing temporary migration for work, e.g. long-distance commute for rotational jobs. The method has long been used to develop new areas and natural resources; however, it is in the Far North that it found greatest use and need [8, p. 183].

Consider the international experience. The social aspects of industrial development in the North, including workforce optimization and addressing the challenges facing the indigenous peoples in Canada or the United States, are similar to what Russia is facing. Alaska’s demographics shows the northernmost state is stabilizing and becoming more similar to the long-inhabited mid-latitude states. Ever more people decide to stay in Alaska even after retirement or when their contracts expire. Canada’s North is split into the Far North, where half the population is indigenous, and the Near North, where no more than 20% of people are indigenous. In most cases, private companies prefer expeditionary work, i.e. to dispatch their workforce to the North for a season under half-year contracts, or rotational jobs, in which case an employee rotates between their workplace and their permanent residence location, where they spend longer time with the family. However, a northern blue-collar makes only 8.5% more money than the country’s average, while the working may can be as long as 12 hours. As a result, staff turnover in Canadian North’s mining industry is 50% to 200% per annum. In general, private companies tend to have a differentiate approach to employee management depending on their category; qualified family men that want to settle for long are treated differently from low-skilled youth that comes here for short. The former group is offered a 40% to 70% bonus. Canadians’ view of rotational jobs is very conservative. They want only Northmen to be hired for such jobs. Timeframes are strict, too. If a resource field is projected to remain in operation for more than ten years, Canadians build permanent housing there, i.e. the public policy is to settle in the North for good [8, p. 184].

As of today, rotational jobs in Russia are regulated by Chapter 47 of the Russian Labor Code, On the Regulation of Rotational Jobs, as well as by the Federal Law N 90-FZ dated June 30, 2006. Regions adopt their local regulations as well. Of interest is the use of rotational jobs to regulate, create, and utilize the workforce in Yamalo-Nenets and Khanty-Mansi Autonomous Okrugs. Notably, they use interregional migration of workforce. Rotational jobs are beneficial since they do not require permanent settlements in climatically adverse locations where the socioeconomic infrastructures are non-existent or undeveloped; still, people in rotational jobs have access to comfortable, albeit non-permanent housing. Institute of Economics and Industrial Engineering, Siberian Branch of the Russian Academy of Sciences, estimates that replacing one permanent job with a rotational job reduces the operating costs of housing and social infrastructures. Air travel accounts for 70% of costs [8, pp. 184–185]. The cons of rotational jobs are harsh climates and long separation from the family, both of which require thorough medical examination before a person can be hired. Besides, people in rotational jobs tend to neglect the special needs of the nature around them, as they do not feel ‘attached’ to the place. O.M. Yermilov and V.V. Yelgin believe that sustainable local development is only possible where municipalities are involved in discussing such matters as the appropriateness of specific rotational jobs, the proportion of intraregional and interregional commuters in rotational jobs, mapping the bases of operation and transportation routes.

Consider the current situation in the Far East in detail as well as what the Government does to keep the migration net positive. From 1991 to 2012, the population of the Far Eastern Federal District dropped by 22.4% [10, p. 37]. The population was dropping due to negative migration net as well as low birth rates. Consider the migration nets in the FEFD per 10,000 people in 1990–2014 in
comparison to the national averages. While the country generally had a low positive migration net, population of the FEFD has been declining since the early 1990s due to emigration from the country. The first emigration wave mainly consisted of people whose ancestors were deported to the Far East during Stalin’s repressions; as soon as the USSR collapsed, these people took their chance to come to their historical homeland: CIS countries, Germany, and Israel. Emigration from the Far East peaked in the mid-1990s due to large-scale liquidation of industries and settlements, which sparked interregional migration to Central Russia and Southern Siberia. Negative migration net is the worst in Magadan Oblast; in Jewish Autonomous Oblast, Kamchatka Krai, and the Republic of Sakha, the negative migration rate is slightly over 80%. However, the Ministry of Eastern Development of the Russian Federation states that in 2016, the Far East had the best demographic figures of the last 25 years. Emigration was only half of the 2015 figures, a third of the 2014 figures. The objective now is to encourage people to move to the region. Only 20% of the projected new jobs can be filled with locals. To fill the remaining 80%, they propose simplified naturalization for children in Russia, a state-supported labor and student mobility program, and reinstating the Veteran Act, which sets forth reimbursement of inter- and intraregional travel expenses for veterans traveling for treatment or medical examination purposes [28]. The Ministry has founded the Far Eastern Human Capital Agency [2] that is currently carrying out is Far Eastern Hectare Program [3]. However, as noted above, newcomers have to live for five to ten years to adapt to the harsh northern climate and to get on with their new communities, i.e. to create sustainable workforce so that the local population is not threatened with depletion due to emigration. For this timeframe, the native population is the most appropriate source of industrial workforce. That approach helps tackle the unemployment and low living standards facing the locals. We believe that seasonal rotation of the local workforce is a better approach than interregional migration. Consider how migration affects the regional human capital in the Republic of Sakha (Yakutia). The migration net of 1959 to 1959 totaled 255.7 thousand people as a result of public measures taken to populate the North. The USSR had migration efforts in place, provided tangible incentives, constructed social housing and cultural infrastructures on a large scale [13, p. 10]. After the USSR collapsed and the industrial towns in the North were declared futile, the Republic’s population dropped from 1,119 thousand people in 1991 to 956.9 thousand in early 2015, mainly due to emigration from the region [13, p. 25]. Thus, 3,306 more people left the Republic for other regions or countries than came here in 1991; the difference in early 2015 was 6,708 people, while the influx of immigrants continued to drop [23, p. 32]. Consider the migration nets in the Republic in comparison to national and FEFD averages. Emigration peaked and thus caused the greatest negative migration net in the mid-1990s. From 1990 to 2002, 18% of the 1989 population or 197.5 thousand people were lost to migration. Migration net had been evening for until 2002 after the Federal Districts were inaugurated in 2002 to optimize regional governance and stabilize regional economies. The 2002 Census revealed the Republic had a population of 949.3 thousand; it had thus failed to retain its one-million status. Over the same timeframe, the share of immigrants dropped from 62% in 1989 to 47% in 2002. Working-age population was fleeing the region on a large scale, a factor that contributed the most to the quantitative and qualitative decline in the local workforce:
- able-bodied population dropped by 10%;
- employment of the elderly rose by 43%;
- 20x times more foreigners are employed now than in 1995.
Unemployment was the natural consequence of a disbalanced regional labor market. From 2003 to 2010, intra-Republican migration prevailed. 60% of migrants were from within the Republic, a sign of highly mobile population. People were mostly leaving rural areas for cities. Country- and FEFD-wide demographic processes affected the workforce. Since 2008, the sheer manpower has been in decline, as the ‘demographic pit’, i.e. the most scarce generations born in the 1990s, reached adulthood. Since the mid-2000s until 2013, the migration rate was increasingly negative, as more people were leaving the Republic for other places in Russia than were coming here; the difference was far greater than the
quoted influx of foreign workers. However, the completion of the Power of Siberia, as well as of the Eastern Siberia to the Pacific Ocean oil trunkline meant major Russian companies (Gazprom, Surgutneftegaz, Transneft, etc.) are opening up new jobs in the Republic. Their HR policies mainly focus on the interregional migration induced by rotational jobs, as workers mainly originate outside the Republic. Newly developed areas are located in Lensky, Aldansky, Neryungirinsky, Olekminsky, Megino-Kangalassky, Tomponsky uluses, where new large-scale industrial facilities are being deployed. These facilities already employ 16.5 thousand people, of whom only 43% are locals. In 2012, the Ministry of Labor and Social Security’s quota for hiring foreigners in the Republic was 9,989 persons. As the local industries are projected to grow, the quota is expected to rise to 24.1 thousand persons by 2022. However, the locals are facing ever greater unemployment rates. Such migration policies are totally unacceptable given high local unemployment rates [9]. Since 2010, Rosstat has been monitoring the ‘population of workers in rotational jobs’. There are 13 thousand such workers in the region, of whom 60% are professionals employed by Siberian, Far Eastern, or Central Russian firms, 40% are locals. Most of the rotational workers work in the Lensky District (62%), with the Neryungirinsky District coming at a far second at 22% [13, pp. 13–17].

Consider the positive case of public-private partnership in the HR policy of OAO Almazy Anabara. Most of the Company’s workers (99%) are locals. The Company has never had any foreign employees; from its very foundation, its HR policy focused on local population. At first, the bulk of staff was formed by mining workers from Ust-Maysky, Aldansky, Neryungirinsky Districts, i.e. from the Republic’s industrial areas. They had experience in a similar industry, they had appropriate skills; however, the production volumes grew with every passing year, and the workforce had to be replenished. Thus, the local population could no longer sustain the Company’s HR needs. Focus was made on the rural settlements where unemployment was critically high. While the Republic’s average unemployment rate was 8.3% as of early 2016, rural districts (Suntarsky, Tattinsky, Khangalassky, Namsky, Ust-Aldansky, Verkhnevilyusky) had 13% to 16%. The Company cooperated with district administrations, employment agencies, and local self-governments to organize career events for rural employees. Today, 48% of the Company’s roster are rural people, including Northmen. This was why the issues of professional training, retraining, and advanced training came to the fore. In 2011, the Company started its special Way to Life Initiative. Under this Initiative, the Company pays for young people’s training and then hires them as dump truck and forklift drivers, bulldozer drivers, electric welders, and shaftmen. After training, the trainees are hired as interns. The Company has mentorships in place; younger workers are supervised by seasoned employees to learn from their experience. Over 1,000 people have so far benefited from this Initiative, a sign of its popularity. Another factor that motivates people to get employed with the Company is its tangible and non-tangible incentives set forth in the Company’s Social Policy. The Company has the following programs in place to attract and retain workforce: Interest-Free Construction Loans for OAO Almazy Anabara’s Employees; Dairy Farm for rural dwellers involved in subsistence farming. These programs help rural people get lumber in the form of commodity loans. The win-win program has been a success in Olekminsky District. To attract and retain young employees, the Company provides targeted training under contracts with universities and vocational schools in the Republic; this helps the Company cover its needs in line staff: miners, shift foremen, mechanics. All this shows that a sound personnel policy might be of outstanding benefit to the employment, income, and living standards of people, in particular in Yakutia [25].

A sociological study was carried out in 2016–17 to analyze the seasonal intraregional migration due to job rotations at OAO Almazy Anabara. Researchers surveyed 47 respondents while those were undergoing medical examination before rotation. Albeit the sample was small, it did suffice for describing the internal migration and labor market problems in the Republic of Sakha (Yakutia). Most of the respondents were from Yakutsk (59.6%); 14.9% were from central uluses, 8.5% were from Vilyusky and adjacent areas, 4.2% were from the transriver areas, 4.2% from the South, 4.2% from the East, and another 4.2% from the North; this correlated well with the Company’s reports. Employees were aged 37 on average, which specialists believe is the best age for mentoring. The respondents
were asked to identify themselves ethnically. Most of them identified themselves as sakha (76.6%). Together with the indigenous small peoples of the North, the percentage rose 83%. 8% of the respondents that identified themselves as Russians could also be deemed native, as these people had been born and resided permanently in the Republic for many generations. Most respondents had vocational (34%) or general secondary (29.8%) education. 23.4% had higher education. 55.8% were qualified blue-collars, 28.8% were specialist workers, and only 15.4% were not qualified at all. Responses to the question about their specific jobs revealed 17 majors, not only in mining but also in education, health, law, and economics. 12 professionals with higher education had blue-collar jobs. Some of the interviewees noted that they did rotational jobs during their vacation from the main job. Thus, the survey effectively refuted the entrenched belief that most of the local workers were low-skilled. 57.5% were married, 25.5% were single. 2/3 had children, mostly 1 or 2 (42.6%), although every 5th respondent had 3 or more children. It was the need to support the family that forced them to seek additional high-level income. Rotational workers were asked questions about migration and labor market in the Republic of Sakha (Yakutia). Most of the respondents said they had come to the North to make better living (53%) or because they were unable to find jobs where they had resided permanently (15.2%). A quarter of the respondents were there for the first time, 15% for the second, and 13% for the fifth time. Some respondents had their 6th to 12th season there. Most of the respondents had 4-month rotations, which matched the duration of the flushing season from June to late September. Those who came to the place for 5 months or more from October to May did so to mine ore. Respondents knew their monthly income better than seasonal figures. It was the high wage that mainly motivated them to dare the harsh conditions of northern industries. Rotational work is tense, and a shift may be as long as 12 hours. Despite that, most respondents said the working conditions, the employer-provided food, leisure, and psychological climates were ‘good’ or even ‘excellent’; thus, the Company had managed to create a good and welcoming workplace.

Respondents were also asked about the Republic’s labor climate, in particular what they thought about the natives’ unemployment rates. Most of them noted low wages (26.5%) in the local labor market, a general decline in industrial manufacturing (15.9%), lack of education-appropriate jobs (12.4%). 9.7% noted a reduction in traditional economy; another 9.7% also mentioned alcoholism of the locals. When asked how they thought unemployment could be addressed, respondents mainly noted the need for new jobs (23.8%), an increase in traditional economic activity (15.1%), better training and retraining systems (10.3%), as well as stronger welfare (10.3%).

The Company pays more to family men than to singles or divorced workers. Salary is the highest for employees aged 26 to 35. Married or divorced workers tend to have more rotations, as they need to support their families. Income correlates with education. Higher-skilled workers make more. However, estimated income does not depend on profession. Besides, many workers work outside their university majors; for some, rotation is a way to fill their time during vacations. The older an employee is, the more seasons they have had.

The findings of the study could be applied to:
- drafting the new standards and regulations for the migration policy to be effective in the industrially developed areas in the north;
- the regional aspects of an emerging labor market;
- creating an efficient HR policy for industrial companies in the Far North.

5. Conclusions
Northern regions have to address their labor market problems: both lack of staff for newly developed industrial sites, and the rising unemployment rates. Although rotational jobs have been in place for more than 40 years here, they still do not constitute a sufficiently visible part of the local industry, as data available on rotational jobs leaves much to be desired (statistics on internal migration has only been collected since 2010); this, in turn, jeopardizes any attempt to assess how efficient seasonal internal migration is in the regional labor market. Besides, interregional internal migration of workers is more prominent, while the local population remains largely uninvolved in the development of
northern regions. Intraregional seasonal migration of the local workforce for rotational jobs contributes to the migration-related acceleratory functions, whereby movement of persons affects their social and psychological traits, helps broaden their horizons and acquire knowledge of various aspects of life, share skills and experience, develop the personality and its tangible, social and spiritual needs, integrate national cultures, thus boosting the region’s human capital.

Russia is facing the following migration issues:
– working-age population continues to immigrate from the CIS;
– ever more refugees arrive to the country’s South.
– people continue to leave the Far East, the North, and East Siberia.

Population in the North is highly mobile, as the proportion of newcomers having settled less than 10 years ago is high; however, indigenous people and native population are the most stable demographic. International experience shows engaging locals from northern towns is the best approach to populating the newly developed areas.

Working-age population has been fleeing the region on a large scale, a factor that contributed the most to the quantitative and qualitative decline in the local workforce:
– able-bodied population dropped by 10%;
– employment of the elderly rose by 43%;
– 20x times more foreigners are employed now than in 1995.

A sociological survey effectively refuted the entrenched belief that most of the local workers were low-skilled. Most of the respondents said they had come to the North to make better living (53%) or because they were unable to find jobs where they had resided permanently (15.2%). With evidence from the Republic of Sakha (Yakutia), this paper explains why seasonal intraregional migration is a must for human capital development in the labor market created by the industrial development of northern regions.

References
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