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Sociological Aspects of Rotational Employment in the Northern Territories of Western Siberia*



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Abstract. The article describes features of the lifestyle associated with rotational employment system in developing oil and gas resources of Northwestern Siberia. It shows the change in conceptual approaches to the organization of commuting, the dynamics of key parameters, the socio-cultural features of mobile and multilocal lifestyle of commuters. The consideration of the rotational method as complex and significant for the implementation of the tasks set for the Arctic and subarctic areas of Russia has allowed to reveal the interaction system of basic elements of commuting and offer more efficient tools and technologies as compared to traditional management. The author presents some results of the sociological research in the oil and gas companies located in Northwestern Siberia. The work discloses the factors of negative impact of commuting on health, physical and social well-being of people leading "double" and mobile lives. They are the following: need for long stay in closed space with strangers, differences in natural conditions of places of residence and work (pressure drops, oxygen deficiency in the North, light aperiodicity, food and water quality, cold and mosquitoes, separation from family, etc.), increased physical and emotional stress. The surveys of employees on rotation, their families and management of the enterprises using this method in the oil and gas areas of the Western-Siberian North, conducted by the author for four decades, have given the opportunity to identify the causes of people's dissatisfaction with conditions of their life, their attitude to authorities and different aspects of organization of production and life, transportation from place of residence to place of employment and back, etc. Geography of fly-in fly-out transportation and the level of satisfaction with various elements of such work have recently changed. The priority importance of payment

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for labor efforts has only preserved. Besides, if in the Soviet period of development of northern oil and gas resources the workers were employed in the Middle Ob region, nowadays the fall in oil production volumes has encouraged the formed groups of workers to begin working for the development of Eastern Siberia, Yamal, etc. The article substantiates the necessity of developing new interdisciplinary research on the basis of acquired results to mitigate negative social consequences of commuting and implementing a sociological monitoring system.

Key words: commuting, multilocal lifestyle, social monitoring, Northwestern Siberia, circumpolar regions, oil and gas production company, Arctic and Subarctic.

The critical need in non-traditional forms of work organization that meet the challenges of production in underdeveloped areas with extreme climatic conditions has originated due to intensive formation of the oil and gas complex in Northwestern Siberia. Provision of cost-efficiency, high labor mobility and presence of staff have been required.

Aside from a lack of production, construction, communication and human resources of the undeveloped areas there is an acute problem of extreme natural-climatic conditions, as the main volume of oil and gas fields are located in the high latitude circumpolar region of the country. Commuting is the only acceptable way to organize production in such conditions.

The idea of commuting is not innovative. According to the archaeological excavations in Egypt, nearby the pyramids there are remains of camps, where commuters lived [6].

In the world practice this form of work organization is widely used both in the development of new territories, construction of large industrial and infrastructure facilities in remote areas and in industry, mainly mining, forestry, branches with seasonal activities, geology, etc. The rotational system differs from shift work, as mobile units regularly travel to objects located so far from the enterprise that the daily return of workers to place of residence becomes either impossible or uneconomic. In Russia the first rotational method was widely applied in the early 1950s in the development of Oil Rocks in the Caspian Sea.

In general, this concept is taken from nautical terminology, where it means the duty on the ship ensuring the continuity of its service. The term is more widely used in other fields.

In the late 1960s due to the need of developing new sparsely populated territories the authorities realized the idea of a "rotational expedition method" to provide new remote work sites with qualified personnel from other regions.

In the Tyumen Oblast the interregional form of the rotational expedition method was first experimentally implemented on a large scale during Kara oil and gas exploration expedition in 1974, when rotational teams flew to work from Tyumen to Yamal (Kharasavey) [3].

In the 1930s, the beginning of Soviet colonization of the Far North, the following development model was adopted — a new town is built close to the new deposit (or group of deposits). In such a way the following cities appeared: Norilsk, Nadym and the rotational village of Pangody — during the development of the Medvezhye Gas Field, Novy Urengoy — the Urengoy Gas Field, Nizhnevartovsk and Megion — the Samotlor Field.

The region formed a unique urban system, differentiated by heterogeneous territory of the Tyumen North. In the Middle Ob region towns were created near each medium and large oil deposits. So, 17 new towns and dozens of villages appeared for less than 2 decades. The situation is different in gas producing Subpolar and Polar Regions. The innovative category of settlements – rotational villages (r.v.) -emerged there: r.v. Pangody in Nadymsky District, r.v. Yamburg and r.v. Novo-Zapolyarny in Tazovsky District of Yamalo-Nenets Autonomous Okrug, r.v. Vyngapurskiy in Noyabr'skiy District, r.v. Pioneer in the Tomsk Oblast, etc.

Hence, if Khanty-Mansi Autonomous Okrug has an extensive network of settlements, new major cities, such as Khanty-Mansiysk, Nefteyugansk, Surgut, Kogalym, Langepas, raduzhnyy and others, Yamalo-Nenets Autonomous Okrug —only Novy Urengoy, Nadym and Noyabrsk.

At the same time, in the Soviet period of the oil and gas complex formation the northern settlements of the Tyumen Oblast were considerably ahead of other Russian regions by level of residents' income, but lagged behind by living standard and social infrastructure development. Extreme cold, low-quality water, mosquitoes, lack of fresh vegetables and fruits and lack of oxygen characterize life conditions of the North, which presuppose higher wages than in central and southern parts of the country.

Compared to other countries, the Russian North, in general, and the northern part of the Tyumen Oblast, in particular, are distinguished by relatively high density of the resident population in the field of natural resources development (in Khanty-Mansi Autonomous Okrug -2.9, in Yamal-Nenets Autonomous Okrug -0.7 person per 1 km²).

At the same time, there is practically no staff qualified in gas and oil processing among the North residents. Meanwhile, for the last 25 years of intensive development the population of Khanty-Mansi Autonomous Okrug has increased 5-fold, Yamalo-Nenets Autonomous Okrug — 6-fold and in 2010 amounted to 1,528.6 thousand and 546.5 thousand people, respectively.

The development concept changed in Russia only in the mid 1980s – 20 years after the formation of the West Siberian oil and gas complex. Novy Urengoy was the last major city established under the old model. The rotational model was adopted as a basis during the development of the next gas giant – Jamburg. The new city was not built; Yamburg was created as a rotational

village for accommodation of staff without family members, who have reduced free time. So, though basic social infrastructure objects are limited, some support functions are expanded, in particular in the field of nutrition and consumer services, usually performed by the family. For greater mobility rotational settlements are constructed from lightweight and dismountable modules of high degree of prefabrication. As a rule, they have built-in or bundled-supplied engineering equipment and furniture.

Nowadays the rotation method is legally regulated by the Labor Code of the Russian Federation, which determines a length and a schedule of work, a system of remuneration and allowances, an employment period of personnel and some general limitations. It should be noted that this legislation does not establish standards of health care and industrial sanitation, organization of a rotation village, nutrition of workers, etc.

Thus, the Labor code contains some framework principles to organize commuting and in each particular case it is necessary for all interacting entities associated with rotational labor organization (heads of enterprises, administrations of northern territories, other federal, regional and municipal structures) to conduct sociological, economic, biomedical and other studies, implementing a multidisciplinary approach to making managerial decisions and adopting necessary regulatory documents.

At the same time, the state authorities have recently refused to regulate the

organization of commuting and give complete control to the companies. The research in the rotational method has decreased as well. Russia has not recently hosted any conference devoted to the study of the problems of commuting. Meanwhile, many countries, on the contrary, encourage this work. Especially large interdisciplinary research is conducted in Australia and Canada and also at the University of Vienna [8, 9, 11, 12].

It should be noted that the use of longdistance commute work in Russia has been constantly expanding since the 1960s. Only in the post-Soviet period in 1991–2011 it more than tripled and today one of four workers is a commuter in Yamalo-Nenets Autonomous Okrug. In Northwestern Siberia, in general, the share of commuters is a bit lower, but greater than 10% of the total employment. This area invites employees from old oil and gas producing regions (the Republic of Bashkortostan, the Republic of Tatarstan), residents of the Russian stagnating heartland and CIS countries. The volume of used labor resources from other areas is increasing today in the region (tab. 1 and 2) will grow even more in the foreseeable future, given the planned amount of work to develop the Yamal Peninsula and continental shelf of northern seas.

To be ready for this, it is necessary to draw attention to the need for multidisciplinary research and analytic studies of all problems associated with the largescale use of commuting.

Table 1. Number of commuters in Khanty-Mansi Autonomous Okrug – Yugra, thousands of people

		2009	2010	2011
Employment industry	Total	Including an interreginal form	Total	Total
Total	69.3	65.1	72.3	69.7
Extraction of energy resources	35.8	32.8	48.9	48.5
Geological exploration	3.1	2.9	-	-
Construction (including drilling)	20.9	20.1	11.1	9.1
Transport and communications	5.7	5.6	6.2	6.0
Electricity	2.2	2.1	1.7	1.7
Social infrastructure	5.5	5.3	3.2	1.3

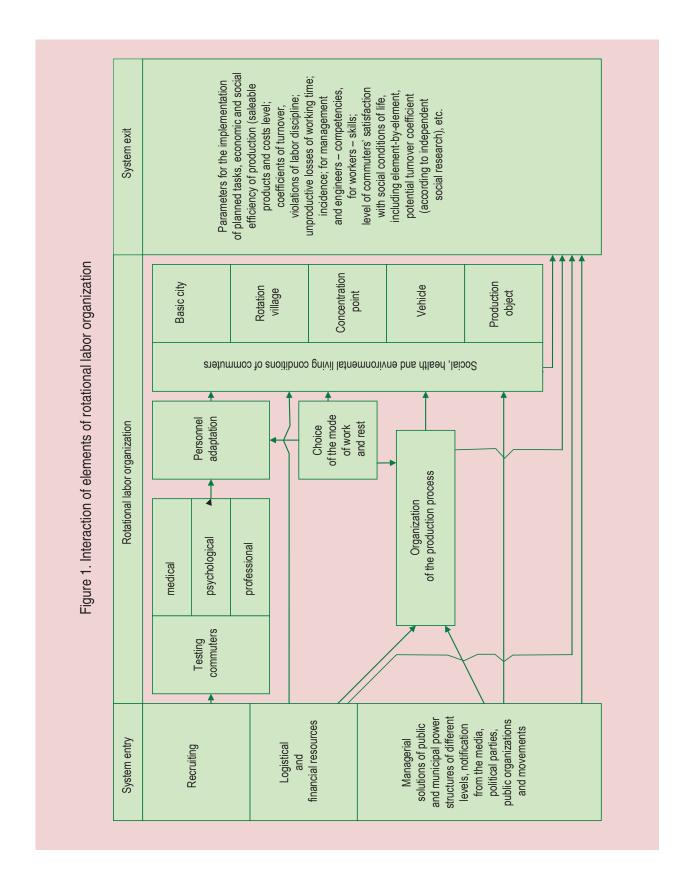
Source: compiled by: *Ekonomicheskie i sotsial' nye pokazateli rayonov Kraynego Severa i priravnennykh k nim mestnostey Statist. byulleten'* [Economic and Social Indicators of the Far North and Equated Localities: Statistic Bulletin]. Moscow: Rosstat, 2012.

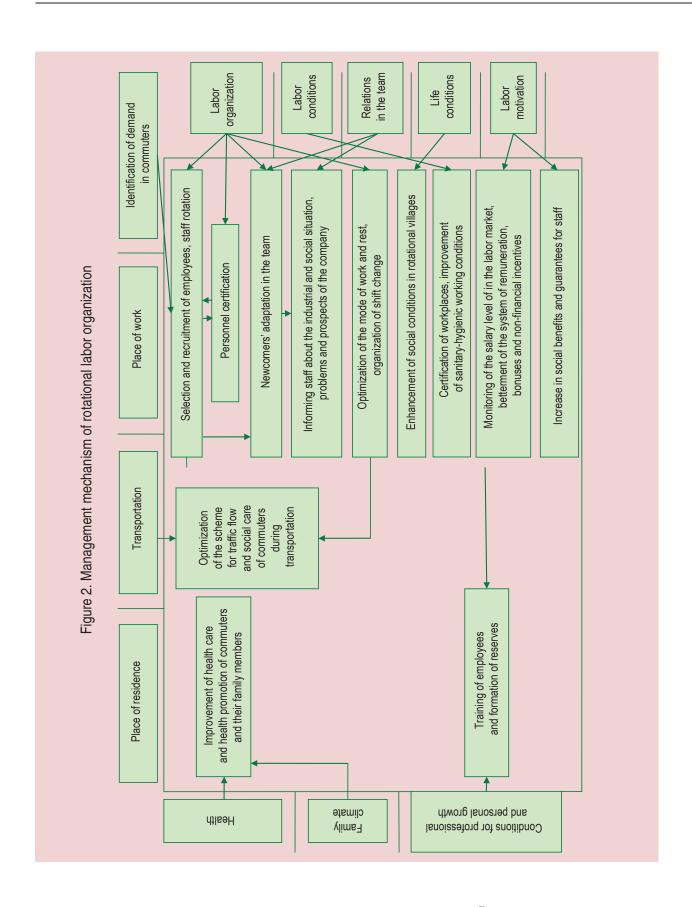
Table 2. Number of commuters in Yamalo-Nenets Autonomous Okrug, thousands of people

	2009		2010		2011		2012	
Employment industry	Total	Including an interreginal form	Total	Including an interreginal form	Total	Including an interreginal form	Total	Including an interreginal form
Total	84.1	66.3	75.5	58.7	82.9	63.9	90.1	71.3
Extraction of energy resources	68.7	54.1	62.0	48.4	69.6	54.1	75.7	60.5
Geological exploration	27.5	18.4	27.6	18.5	26.9	17.0	27.0	16.7
Construction (including drilling)	19.2	16.7	18.1	15.8	21.4	18.7	26.8	24.5
Transport and communications	15.1	13.1	14.1	12.1	16.7	14.7	18.8	16.6
Electricity	2.7	2.0	3.6	2.7	4.0	3.1	4.3	3.3
Social infrastructure	2.5	2.2	2.2	2.0	2.0	1.8	1.8	1.6

Source: compiled by: Ekonomicheskie i sotsial nye pokazateli rayonov Kraynego Severa i priravnennykh k nim mestnostey Statist. byulleten [Economic and Social Indicators of the Far North and Equated Localities: Statistic Bulletin]. Moscow: Rosstat, 2012.

It is required to identify all latent problems, their hierarchy and interaction and find possible solutions, evaluating their effectiveness. Anyway, they are associated with different elements of rotational labor organization (fig. 1) and the management mechanism (fig. 2), which consists of 3 blocks, reflecting commuters' activity in place of residence, place of employment and in the process of movement from one





place to another [10]. The model and the mechanism presented in figures 1 and 2 reflect a conceptual approach to the methodology of the conducted sociological research, which, in our opinion, should be interdisciplinary and include a wide range of issues, such as nutritional standards, aesthetic arrangement of social and cultural space in rotational villages, psychological features of commuting, etc. So, it is important to consider information and visual pressure of shift work due to insufficient spatial and excessive time limits and socio-psychological load due to prolonged social isolation in a small group.

Life in motion, a mobile lifestyle of commuters requires continuous comprehensive research of sociologists, psychologists, physiologists, lawyers, anthropologists and representatives of other scientific fields. Commuters themselves evaluate their life as "consisting of two halves" or just "double".

It is clear that different values and views on life of uneven-aged workers, representatives of different regions, ethnic groups and religions, inevitably sharing a room for a long time, can lead (and lead) to conflicts, negative impacts on the psychoemotional state of employees on rotation and conditions for their relax after a hard shift. Commuters arriving in the North from different region bring here values of their subcultures, which often contradict with each other [5].

In this case, commuting lacks the element of social infrastructure, which can

not be created even having any investment. It is socio-spiritual space, including parents and other relatives, grandparents, cemetery, where close people are buried. Thus, many northerners-stationary workers have difficulties with their identity; they are not sure where there is their home: here in the North, where they have lived long or in the place where they came from. Even those who have spent most of their adult life in the North, consider themselves as temporary workers

Commuting as a social phenomenon is like an iceberg, with periodic movement of a person from place of permanent residence to place of work being its top. However, it contains diverse social phenomena and processes related to the characteristics of life of commuters, their implementation of production tasks, adaptation and socialization in the non-traditional environment, including development and settlement of new territory, creation of new socio-territorial communities, etc.

The rotational method of work organization has different adverse effects on person's health, for example, long stay with strangers. The North does not only give anything, but also takes something in return: in the Far North the lack of oxygen amounts to 30% compared to the midland of Russia. Chronic oxygen deficiency, sudden pressure changes within a short period of time lead to the development of cardiovascular disease, the change of pressure level of a person, contribute to the rise in blood sugar. The medical and

physiological studies do not recommend working in the Far North for more than 5–7 years without a break.

When hiring employees an employer considers the state of health of candidates who undergo a medical examination to confirm the absence of contraindications to work in unfavorable circumstances. Besides, the constant change of climate due to movement across time and climate zones can not but affect the human body. An employee, permanently residing in the territories bordering the West Siberian region, endures labor conditions in the Far North than an employee from the midland of Russia and especially from the southern regions of the country.

The work of commuters involves high emotional stress. Suffice it to say that their average work week, depending on the mode of work and rest, amounts to 50–60 hours, which is significantly above the standard 40 hours. It is worsened by many emotional factors (cold, mosquitoes, light aperiodicity in the polar night, need for constant adaptation and re-adaptation, recurrent communication relations in rotational villages, domestic troubles, caused by separation from family, thoughts about children, etc.). Stress leads to frustration, emotional "burnout" and mental illness.

Thus, our sociological research is aimed at identifying social aspects of the rotational labor organization in the circumpolar areas and on this basis developing the technologies that minimize negative effects of a mobile multilocal lifestyle of commuters and improve their quality of life.

The author studied the social processes associated with commuting in the West-Siberian North since 1974 to date, analyzing the dynamics of changes and its influencing factors. Commuters, their families and experts were regularly surveyed. The majority of commuters (82–88%) are satisfied with their lifestyle and not going to return to the traditional way of life.

The methodological tools (questionnaires, expert surveys, etc.), developed by the author, remained the same, which allowed us to analyze the dynamics of changes. The survey was conducted in the workplace in the period between shifts, hostels, educational and training centers, concentration points, airports and helipads while waiting for transport.

Sampling based on the territorial and socio-demographic criteria for the selection of observation units consisted of 2 stages: the first involves the selection of settlements according to their status in the system of settlement and industry specialization, the second – the selection of respondents according to the social structure and labor experience in commuting [4]. Meanwhile, many elements of the social situation associated with rotational work have changed over the years (tab. 3).

Thus, in the Soviet period commuters were most displeased with transportation associated with long waiting for transport in unsuitable places and social services in rotational villages. I often had to visit them and watch how people slept on dirty

Duchlama	Significance rank by year			
Problems	1990	2005	2014	
Dissatisfaction with payment	1	1	1	
Poor working conditions	2	3	3	
Dissatisfaction with logistical support	8	4	6	
Inefficient organization of production	5	3	2	
Bad care of managers about employees	4	8	4	
Lack of information about the state of affairs in the organization	6	5	7	
Bad living conditions	7	6	5	
Dissatisfaction with transportation	3	7	8	

Table 3. Change in the acuteness of problems in the teams of commuters (rank 1 – most relevant)

mattresses without bed linen and workers returned from a shift waited for free place to rest. After it I experienced culture shock, having visited a rotational village in Alaska. In the post-Soviet period these two problems have been largely solved.

Employees' dissatisfaction and related conflicts in commuter teams in recent years are caused by insufficient wages and delayed payment associated with leaving for home. According to table 3, this factor remains the most important for commuters during the entire period of the study.

In addition to commuters' evaluations of various aspects of their life, the geography of transportation has changed over the years. If in the Soviet period the Tyumen North attracted mainly oil industry workers from Azerbaijan, gas workers from Ukraine, builders from the Baltic States and Armenia, in the post-Soviet years — commuters from different regions of Russia, Kazakhstan and other Central Asian countries.

Many respondents single out the inability to be alone as one of their main problems. Meanwhile, it is known that this ability helps a person not only reflect and introspect, but also relieve emotional stress.

It is found out that the employees who have greater rotational experience suffer from insomnia, feelings of emotional exhaustion, lack of appetite (or overeating), abuse of nicotine, coffee and alcohol.

The relevance of research in commuting is associated not only with the need for new natural resources in the North and the East of the country. The rotational method is important for many citizens of Russian settlements and border territories of the CIS with a high level of unemployment. The work in the North is almost the only opportunity to improve a level and quality of life. Therefore, it is necessary to study both regional social issues (at places of permanent residence and work) and problems of inter-regional cooperation

and, first of all, of strengthening the role of civil society institutions, which could have a significant influence here [1].

Thus, in spite of the problems commuting has significant potential for all related parties: commuters, their employers, Northern cities and regions-donors of the workforce. This quite flexible technology can reduce costs and time required to accomplish goals, timely respond to the dynamic market situation and adapt to the changes in demand. In addition, the rotational work organization method can significantly reduce an unemployment rate, promote social mobility of workers and their family members and enhance a level and quality of their lives.

Commuters connect various socioeconomic spaces of the "Mainland" and the North, significantly affecting both.

It is clear that commuting requires much more organizational effort than traditional. In addition to the common management functions it is necessary to organize delivery according to the scheme "basic city — rotational village — deposit", provide commuters with social services, etc.

In general, commuting is economically beneficial due to reduced costs of all resources for the creation and maintenance of settlements and less number of workers of oil and gas production there (Tatarstan, Bashkiria, etc.); employees retain usual conditions in the inhabited areas of the country, as their families are not relocated to a new place of residence.

Social aspects of commuting are not so unambiguous. Although the majority of respondents assess it positively and do not want to work differently, there are objective negative factors that require special studies. Primarily they are connected with frequent and significant movements in space (climate-zonal contrasts, temporal gradients, changes in the quality of food and water, epidemiological and radiation environment, etc.), violations of daily routine, raised labor intensity, physical and psycho-emotional loads, long periods of life without family (insufficient participation in upbringing children, changes in sexual life), etc. All this sooner or later leads to significant deterioration of people's health and ultimately affect health of future children. The medical researches confirm irreversible changes in people's health living over 10 years in the Extreme North, and undesirability of the sharp change of climatic zones for subsequent permanent residence. In addition, life in rotational villages and closed groups with little personal space requires special personal qualities: social flexibility, ability to get on with the team and accept group norms and values.

Social dissatisfaction can manifest itself in the negative attitude to power structures and lead to protest actions. We studied a level of trust in different state institutions and authorities among northerners (tab. 4).

So, most respondents have little trust in power structures and their representatives.

Trust level		Ordinary employees	Commuters	
2007 survey	Trust	25.6	32.8	
	Do not trust	40.9	25.4	
	Difficult to answer	33.8	41.8	
2010 survey	Trust	26.2	31.2	
	Do not trust	30.1	41.4	
	Difficult to answer	43.0	27.4	
2013 survey	Trust	25.5	28.4	
	Do not trust	38.7	28.6	
	Difficult to answer	36.3	43.0	

Table 4. Trust in the authorities among northerners, %

However, the level of distrust among permanent residents of the North is much higher than among mobile workers from other regions.

The impact of commuting on the environmental situation in the Northern region is also ambiguous. On the one hand, employees on rotation spend here much less time than the resident population, live without second and third family members and require the construction of smaller volumes of social facilities. Therefore, anthropogenic pressure on natural landscapes and negative impacts on living conditions of aboriginal people are significantly reduced. However, commuters have an obvious negative subjective impact, as they are temporary workers, not owners of this land.

Complex social and labor problems are registered in the oil companies in the Middle Ob region, which the volume of hydrocarbon production is sharply reduced and the maintenance of the existing teams requires the application

of their labor potential in other regions. It presupposes the extensive use of the rotational work organization method in the future; however, its paradigm is radically changed: nowadays employees from other regions do not fly to the Ob North and resident oil industry workers are employed on a large scale in Eastern Siberia. Yamal, etc.

Since December 2012 UTair Aviation operates charter rotation flights to Talakan airport of the Sakha (Yakutia) Republic from Surgut with the aircraft "Boeing 737" in support of OJSC "Surgutneftegas". Commuters arrive there due to UTair regular flights from various points. Then passengers continue flying to remote work sites by helicopter provided by UTair and based at the airport. In the reverse direction commuters fly home after finishing work. The complete transportation cycle with airplanes and helicopters of the same airline helps optimize routes and delivery time of workers, saves time and reduces cost of the customer.

In 2013 84,218 passengers were transported in the direction Surgut—Talakan—Surgut. The development of the Talakan field will stimulate the increase in traffic through Talakan due to the opening of regular flights for people living in the remote areas of Yakutia, the Irkutsk Oblast and Krasnoyarsk Krai in the coming years [2].

However, there are still many social and managerial problems of effective rotational work organization: social well-being of employees, preservation of their health, need to improve their standard of living, etc. Social processes taking place in commuters teams in the North require careful study and development of adequate management mechanisms and technologies aimed at improving the social situation and making commuters from "human resource" into social actors.

It is necessary to create social technologies neutralizing the impact of negative aspects of commuting. We are talking primarily about technologies to select workers, able to work in the North, their adaptation, effective work motivation,

choice of modes of work and leisure, transportation, social services, etc. The list also includes social benefits and guarantees for commuters and mechanisms of interaction between companies and public authorities in the places of permanent residence of commuters and the places of their work.

The author has developed, tested and implemented such technologies in the form of rotational work standards and regulations for the departments of Glavtyumen'geologiya, one of the largest subsidiaries of Gazprom – LLC "Gazprom dobycha Yamburg" and OJSC Var'eganneft'. Obviously, that requires constant monitoring and, if necessary, adjustment, with the situation dynamics being taken into account.

Commuting should be scientifically supported by sociological, biomedical, economic, legal, psychological and other studies. The monitoring system is required to regularly control changes in the economic situation and social processes in commuters teams and take timely and necessary corrective management measures.

References

- 1. Markin V.V. Regional'naya sotsiologiya i upravlenie: "dorozhnaya karta" vzaimodeistviya [Regional Sociology and Management: a "Roadmap" for Interaction]. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz* [Economic and Social Changes: Facts, Trends, Forecast], 2014, no. 5 (35), pp. 135-142.
- 2. Ol'khovskaya U. Polnyi vakhtung [Integrate Commuting]. *Ekspert-Sibir'* [The Expert-Siberia], 2011, no. 44, pp. 10-14.
- 3. Silin A.N. O netraditsionnykh formakh organizatsii truda na Krainem Severe [On Alternative Forms of Work Organization in the Far North]. *Sotsiologicheskie issledovaniya* [Sociological Studies], 1987, no. 4, pp. 76-78.

- 4. Silin A.N. Mezhregional'noe ispol'zovanie chelovecheskikh resursov na Krainem Severe [Interregional Use of Human Resources in the Far North]. *Sotsiologicheskie issledovaniya* [Sociological Studies], 2011, no. 9, pp. 41-47.
- 5. Silin A.N. Mul'tilokal'nost' obraza zhizni: opyt sotsiologicheskogo issledovaniya [Multilocality of a Lifestyle: Experience of Sociological Research]. *Obshchestvo i sotsiologiya v sovremennoi Rossii* [Society and Sociology in Modern Russia]. Vologda: ISERT RAN, 2015, pp. 41-44.
- 6. Khaitun A.D. *Ekspeditsiono-vakhtovoe stroitel'stvo v Zapadnoi Sibiri* [Expedition-Rotational Construction in Western Siberia]. Leningrad: Stroiizdat, 1982. 176 p.
- 7. Belonozko M.L., Silin A.N. Russian North: Change of Social. *Viddle East Journal of Scientific Research*, 2013, no. 16 (2), pp. 150-155.
- 8. Buscherm Urry J. Mobil Methods and the Empirical. *European Journal of Social Theory*, 2009, no. 12 (1), pp. 99-116.
- 9. Saxinger G., Öfner E., Shakirova E. Ich bin bereit Die Nächste Generation Mobiler Fachkräfte in der Russischen Erdgas und Erdölindustrie. *Austrian Studies in Social Anthropology*, 2014, no. 2, pp. 1-24.
- 10. Silin A.N. Long Distance Commuting in Oil and Gas Production Industry in the Northwestern Siberia: Sociological Analysis of Change. *Mediterranean Journal of Social Sciences*, 2015, no 3, pp. 199-206.
- 11. Storey K. Fly-in. Fly-out: Implications for Community Sustainability. *Sustainability*, 2010, no. 2, pp. 1161-1181.
- 12. Weichhart P. Multilocalitat Konzepte, Tgeorie Bezuge und Forschungsfragen. *Informationen zus Rauman Twicklung*, 2009, no. 1(2), pp.1-14.

Cited Works

- 1. Markin V.V. Regional Sociology and Management: a "Roadmap" for Interaction. *Economic and Social Changes: Facts, Trends, Forecast*, 2014, no. 5 (35), pp. 135-142.
- 2. Ol'khovskaya U. Integrate Commuting. *Expert-Siberia*, 2011, no. 44, pp. 10-14.
- 3. Silin A.N. On Alternative Forms of Work Organization in the Far North. *Sociological Studies*, 1987, no. 4, pp. 76-78.
- 4. Silin A.N. Interregional Use of Human Resources in the Far North. *Sociological Studies*, 2011, no. 9, pp. 41-47.
- 5. Silin A.N. Multilocality of a Lifestyle: Experience of Sociological Research. *Society and Sociology in Modern Russia*. Vologda: ISERT RAN, 2015, pp. 41-44.
- 6. Khaitun A.D. Expedition-Rotational Construction in Western Siberia. Leningrad: Stroiizdat, 1982. 176 p.
- 7. Belonozko M.L., Silin A.N. Russian North: Change of Social. *Viddle East Journal of Scientific Research*, 2013, no. 16 (2), pp. 150-155.
- 8. Buscherm Urry J. Mobil Methods and the Empirical. *European Journal of Social Theory*, 2009, no. 12 (1), pp. 99-116.
- 9. Saxinger G., Öfner E., Shakirova E. Ich bin bereit Die Nächste Generation Mobiler Fachkräfte in der Russischen Erdgas und Erdölindustrie. *Austrian Studies in Social Anthropology*, 2014, no. 2, pp. 1-24.
- 10. Silin A.N. Long Distance Commuting in Oil and Gas Production Industry in the Northwestern Siberia: Sociological Analysis of Change. *Mediterranean Journal of Social Sciences*, 2015, no 3, pp. 199-206.

11. Storey K. Fly-in. Fly-out: Implications for Community Sustainability. *Sustainability*, 2010, no. 2, pp. 1161-1181.

12. Weichhart P. Multilocalitat Konzepte, Tgeorie Bezuge und Forschungsfragen. *Informationen zus Rauman Twicklung*, 2009, no. 1(2), pp.1-14.

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