Gender Roles of Indigenous Women Reindeer Herders in Transition with Particular Reference to the Arctic Siberian Tundra Areas: Challenges of Social (In)Security

Elena Bogdanova, Konstantin Filant, Praskovia Filant, Sergei Andronov, Andrei Lobanov

Abstract

The changing role of women in the traditional Indigenous communities of the Russian Arctic in the 21st century is a rarely studied phenomenon. However, this is an important period of significant strengthening of their civil, political and social rights compared to the 18th to 19th centuries, when gender inequalities and strict subordination of women limited their choices. Now, their voices can be heard: they can participate in political life and lobby for their rights to regional and federal authorities. However, some social insecurities still remain for women reindeer herders.

During the last decade, gender asymmetries concerning lifestyle, educational level and marital behaviour have intensified and resulted in increasing emigration of women from the tundra as they have chosen to abandon their traditional lifestyles and move to urban areas. This chapter analyses the changing position of women in traditional reindeer herding societies and whether these transformations have improved women's social security, reduced gender inequality and increased social justice.

To increase the social security of women reindeer herders, the authors recommend encouraging these women to apply for official self-employment (*samozanjatyj*) status (special tax regime with a tax on professional income), supporting cooperative forms of reindeer herding husbandry that employ women reindeer herders, encouraging the semi-nomadic lifestyles of Indigenous women, developing facilities in settlements for processing reindeer herding products that are managed by reindeer herders' families, organising production cooperatives for reindeer herders to develop facilities for deep processing of reindeer products and increasing the profitability of reindeer herding.

Introduction

Sustainable development for the Indigenous small-numbered peoples of the North, Siberia and the Far East is one of the priority tasks of the Strategy for the Development of the Arctic Zone in the Russian Federation and Ensuring National Security for the Period Until 2035 (No. 645, 2020). However, 'the maintaining and dissemination of the cultural heritage, the development of traditional culture, the preservation and development of the languages of Indigenous Peoples' (Strategija razvitija [Strategy for the Development], No. 645, 2020) is impossible without the participation of women. They are key persons in maintaining the traditional life support system and national culture. At the same time, the impact of socioeconomic and cultural transformations in society in the 20th to early 21st centuries, accompanied by the penetration of both technological innovations and the European value system that is not specific to the traditional culture of the Indigenous peoples of the Russian High North, have contributed to changing these traditional lifestyles. Liarskaia (2010, p. 3) noted a gender shift in Yamal at the beginning of the 21st century. However, over the past 10 years, the situation in Yamal has changed dramatically. Now, the asymmetries (regarding lifestyle choices, education and marital behaviour), which were not so evident before, have intensified and led to an increase in the emigration of women from the tundra as they choose to abandon their traditional lifestyles and move to urban areas.

Analysis of the ethnographic literature on the culture of the Nenets (from the end of the 19th century to the present) shows that gender issues are insufficiently represented. However, prior research can be found on the gender issues of the Indigenous peoples of the Yamal by Russian researchers (e.g., Andronov et al., 2020; Bogdanova et al., 2018, 2019, 2021; Liarskaya, 2010; Nabok & Serpivo, 2017; A. Popova, 2004; Serpivo, 2016). The problem of the influence of inter-ethnic marriages of the Nenets on ethnic and demographic processes has also been presented (e.g., Andronov et al., 2020; Kvashnin, 2002; Kvashnin & Volzhanina, 2003; Volžanina, 2005, 2007a, 2007b, 2009, 2010). Finally, Khariuchi (2001, 2010) discussed the role of Nenets women in science.

Additionally, some fragmented gender analyses of the Indigenous peoples of the Russian Arctic have been undertaken by foreign researchers (e.g., Vladimirova, 2018; Vladimirova & Otto Habeck, 2018). However, the language barrier, as well as foreign scientists' difficulties observing ethical guidelines for conducting scientific research in the territory of the Russian Federation (due to the differences in national academic conventions concerning Russia), have

complicated the gathering of sufficient field data, thus reducing the quality of these analyses. The value of these works lies in providing an independent, outside perspective regarding the experiences of the Indigenous peoples in the Arctic.

This chapter presents data on how the position of women in traditional reindeer herding societies has changed and whether these transformations have improved women's social security, reduced gender inequality and increased social justice. Therefore, this chapter aims to 1) contribute to gender analysis and reflect on some gender inequalities in the Indigenous reindeer herding communities in the Arctic zone of Western Siberia, 2) give some historical background on the gender inequalities in the 19th century in Yamal to show the transition of women's position in Indigenous society and strengthening of women's rights and 3) present unique data on some of the gaps in Indigenous women's civil and social rights that have encouraged these women to change their lifestyles and migrate from rural to urban areas.

Materials and Methods

Study Design

This chapter presents the results of a retrospective, cross-sectional, gender and comparative historical analysis of gender inequalities and changing gender roles of Indigenous women living in remote reindeer herding communities of the Yamal-Nenets Autonomous Okrug (YNAO). This includes both Indigenous women living in the tundra and in settlements. This study used a multidisciplinary approach that drew on methods used in the fields of law, sociology and health economics. This study sought to analyse shifts in gender roles concerning the changes to traditional lifestyles, marriage and reproductive choices, education and migration trends. Indigenous women's civil, political and social rights as well as remaining gender inequalities are presented.

The Yamal-Nenets Autonomous Okrug: Geography, Population and Ethnic Structure

The YNAO, the geographic focus of this research, is an important region for the Indigenous peoples of Russia and is located in the circumpolar northwest of West Siberia. It has a population of 544,008 living in an area of 769,250 square kilometres. The population density is 0.71 people per square kilometre. The location of the YNAO (more than half of its territory

is beyond the Arctic Circle) significantly impacts traditional livelihoods in this region (Fig. 1). It is a unique territory because almost half of the minority Indigenous population of the Russian Arctic (48,606 people) reside there, including the Nenets, the Khanty, the Selkups and the Komi-Zyryans. A total of 9,657 Indigenous people living in the tundra areas are part of a nomadic culture and community (Edinaja informacionnaja sistema [Unified information system], 2018). The culture, health and social well-being of Indigenous peoples are strongly linked to a traditional lifestyle (Bogdanova et al., 2021, pp. 3–4).



Figure 1. Reindeer herding districts of the YNAO.

This region has a complicated ethnic structure of Indigenous and non-Indigenous populations. Historically, three population groups were formed in this rural area: Indigenous nomadic peoples, Indigenous peoples living in settlements and non-Indigenous peoples arriving from other parts of Russia and former Soviet republics. Their lifestyles differed. In the 11th century, some Nenets and Khanty clans migrated to the Arctic and Subarctic zones of the Yamal area. The traditional social organisation of the Nenets was based on the existence of two original clans – the Samoyed clan Kharyuchi and the clan Vanuyta, which goes back to the aborigines. The first reliable information on the tribal composition of the Obdorsk Nenets, which included the Yamal Nenets, is contained in the Book of the Obdorsk Samoyeds written in 1695 (G. Popova, n.d.). Since the 17th century, the name Obdorsk Samoyeds was used to refer to all Nenets from Yamal to Taz. In the 16th to 17th centuries, the Selkups settled in this territory. Later, in the 19th century, the Komi-Zyryans also moved to Yamal (Lobanov et al., 2012). Due to its geographic location at the Arctic Circle and the landscape features of the YNAO (almost half of its territory is located in the tundra of the Subarctic zone, and it occupies the southern parts of the Yamal and Gydan Peninsulas), the Nenets – who arrived first – became nomadic reindeer hunters in the tundra. The Khanty, the Selkups and non-Indigenous peoples later founded small settlements, where they mostly lived by hunting and fishing. Nowadays, almost 112 ethnic groups are settled in the YNAO, and only about 10% of them belong to Indigenous minorities (SOTY, 2015). These Indigenous peoples follow a traditional lifestyle as the basis for meeting their vital needs and surviving in the Arctic.

Theoretical Framework of the Gender Analysis

The extended theoretical background of this gender analysis is presented in the chapter 'Indigenous Gender Justice with a Focus on Sámi Reindeer Herding in Sweden' by Asztalos Morell. Some of the most relevant gender issues raised by her that are relevant to the case of the Indigenous Peoples in the Yamal are discussed below.

According to feminist theory, gender is a social principle used to organise all fields of relations. Walby (1997) identified six structures of patriarchal relations: family and household, paid work, state, culture, domestic violence and sexuality. In the previous centuries, 'household-based production [was] the main structure and site of women's work activity and the exploitation of her labour and sexuality and upon the exclusion of women from the public' (Walby, 1997, p. 6). This household-based production did not correspond to social

justice for women and increased gender inequalities because of the 'segregation and subordination of women within the structures of paid employment and the state, as well as within culture, sexuality and violence' (Walby, 1997, p. 6).

Comparative welfare state analyses have contributed to the theorisation of rural gender regimes, focusing on how gender inequalities are expressed in civil, political and social rights (Asztalos Morell & Bock, 2007) and addressing social justice (Marshall, 1950, p. 10). These analyses have investigated how women's property rights, inheritance, labour rights and the division of labour within the household impact the transition of women's lifestyles, economic welfare and social security.

Measurement Tools

Survey Data

Information about the socio-demographic characteristics of Indigenous women was collected from a survey conducted in the Arctic zone of Western Siberia during expeditions to settlements and tundra areas of the YNAO in the summer (August) and winter (March and November) of 2013 to 2020. Data collection was completed in cooperation between the YNAO Arctic Scientific Research Center, the Health Department of the Government of the YNAO, the Association of Reindeer Herders of the YNAO and the Northern Arctic Federal University. The inclusion criteria for the respondents were: women aged 18 and older, involved in reindeer herding, residing in the tundra or the settlements of the Arctic zone of Western Siberia for over 5 years. All participants were divided into two groups: Indigenous women living in the tundra or the settlements. The participants were asked to complete the questionnaire while undergoing a medical examination conducted by the YNAO Arctic Scientific Research Center at health care institutions (municipal hospitals and feldsher-midwife medical stations in remote settlements) in the Tazovsky settlement, the Tazovskaya tundra, the Nakhodkinskaya tundra, the Gyda settlement, the Gydanskaya tundra, the Yavai-Salinskaya tundra and the Priutralsky and Shuryshkarsky districts. Questionnaires were written in Russian. Data collection was undertaken by the researchers with the assistance of Indigenous women representing Indigenous associations. A total of 836 Indigenous women participated in the surveys. Their status as Indigenous was determined during the enrolment interviewers

based on their primary Indigenous language, self-identification, nomadic or semi-nomadic lifestyle and involvement in reindeer herding.

The analysis of marriage bonds was based on interviews with 264 Indigenous peoples (Nenets) during expeditions to the Tazovskaya, Gydanskaya and Nakhodkinskaya tundras in the Tazovsky district of the YNAO in summer (August) and winter (March and November) of 2017 to 2018. Semi-structured interviews were based on the interview guide developed in Russian and approved by the Arctic Scientific Research Center of the YNAO. The data were obtained for 2973 individuals (ancestors and descendants of the respondents). So, the information of three generations of the Nenets living in the Tazovskaya, Gydanskaya and Nakhodkinskaya tundras were summarised (n = 3237). The data were uploaded to a database and analysed using Microsoft Excel 2016 and Statistica for Windows, v. 8.0 (StatSoft Inc., Oklahoma, USA). To assess the significance of differences between the groups, the chi-squared criterion was used for qualitative variables. To process the data on the frequency of marriages and division into groups, cluster analysis was implemented.

The selection criteria for the respondents were Nenets origin (at least one parent had a Nenets origin), Nenets-speaker, and a traditional lifestyle (mostly nomadic or semi-nomadic), which was determined during the medical examinations provided by the researchers of the Arctic Scientific Research Center of the YNAO. Equal representation of men and women with the same surname was assumed; to avoid mistakes caused by less women with a particular surname because they change their surname when they get married, the analysis of marriage bonds was conducted.

All participants completed a confidential paper questionnaire. The participants received information about the programme, both verbally and in writing. They provided written informed consent. The consent form stated that participation was voluntary, and their confidentiality was assured. Participants' personal data and their answers were anonymised, numbered and uploaded to the de-identified database.

Historical Background of Gender Inequalities in the Indigenous Communities in Yamal (18th to 19th Centuries)

Women in Indigenous reindeer herding communities in the 18th to 19th centuries were completely subordinate to men and experienced social security risks. Girls could not be

successors of the clan or in charge of reindeer herding, so the birth of a boy in the family was preferable.

When giving a daughter in marriage, the parents received a *kalym* (compensation to the bride's parents for marrying her) from the fiancé. There were cases when parents gave their daughter to another family to raise and then demanded her back after she reached the age of 14–16 years old because they wanted to receive a kalym for her. For example, on 7 January 1886, the Obdorskaya Uprava² examined such a case (No. 17):

The Samoyeds of the Lomdu clan, the spouse of Khani, declared that the samoyed Stepan Vymya from the Puika clan wanted to get back his daughter Maria, aged 15 years.... After her mother's death, her father couldn't look after her. So, she was given to the grandmother's family, where she stayed until the age of three. Then the grandmother sent Maria to her uncle Hani's family, which was the family of the brother of Maria's mother. Here she was fed, clothed and brought up like a daughter, without the family receiving any reward from anyone. Maria said that she has just now met her father for the first time in her life and would like to stay until marriage with the foster family that took care of her for all this time.... The father does not agree to leave his daughter with Hani. (Kirichenko & Zibarev, 1970, pp. 28–30).³

Finally, Stepan Vymya was offered to take his daughter if he could cover the costs for Maria and give 10 reindeer to the foster family. However, he refused.

Therefore, the parties were offered three options for settling the case: 1) to give Maria back to her father but, in instance of her marriage, have the right to kalym given to the foster family; 2) to leave Maria with the foster family, who would get a kalym for her in the instance of her marriage; or 3) to leave Maria with the foster family and give half of a kalym to her father in the instance of her marriage. If half of the kalym was less than 10 reindeer, then the foster family would receive the cost of 10 reindeer and would give the rest to Stepan Vymya. The third proposal was accepted by the parties voluntarily. (Kirichenko & Zibarev, 1970, pp. 28–30).

Thus, young women in this culture could be sold to someone else as a commodity.

_

² Executive body of city public administration in Russia during the imperial period.

³ All of the quotes were translated by the authors.

If a wife left her husband, the latter had the right to demand her parents to return the kalym paid by him for the bride or to compensate a part of it. For example, on 9 January 1889, the Obdorskaya Uprava examined case No. 27:

About the kalym given by the samoyed Tuzida Pezeme for Aksinya, the Samoyedin Vanuitin' daughter, who ran away with Peter Serotetto.... Pezem paid a kalym of 140 reindeer, 80 arctic foxes, 2 black foxes, 1 white bird and 50 rubles. Thus, he made a claim. As compensation for the kalym, he accepted 30 reindeer and 70 rubles from Peter Serotetto.... Therefore, 30 reindeer were taken from Serotetto in favour of Pezema. (Kirichenko & Zibarev, 1970, p. 47).

A woman was completely subordinate to a man, who was supposed to provide her with food and clothes. Therefore, there were frequent cases of abuse against women. Women often endured abuse by their husbands and rarely applied for protection of their rights to local authorities (the Uprava). However, several cases in the archives show that some women did exercise their civil rights. For example, on 10 March 1798, Efimya Sidorova complained to the Tobolsk Spiritual Consistory (Fig. 2):

About her dishonest maintenance by her husband, and that he did not feed and supply her with clothes.... [Her husband] lived dishonestly and repeatedly punished her, sold out her dresses to 'drink the money' [buy alcohol]... while Efimya had to prepare wood for the fire alone [to heat the house -EB]. (Case No. 1798)

Another case was examined by the Obdorskaya Uprava on 29 April 1882. Ekaterina Rusynelinkhova complained about the cruel behaviour of her husband Philip, who regularly beat her (Kirichenko & Zibarev, 1970, p. 28).

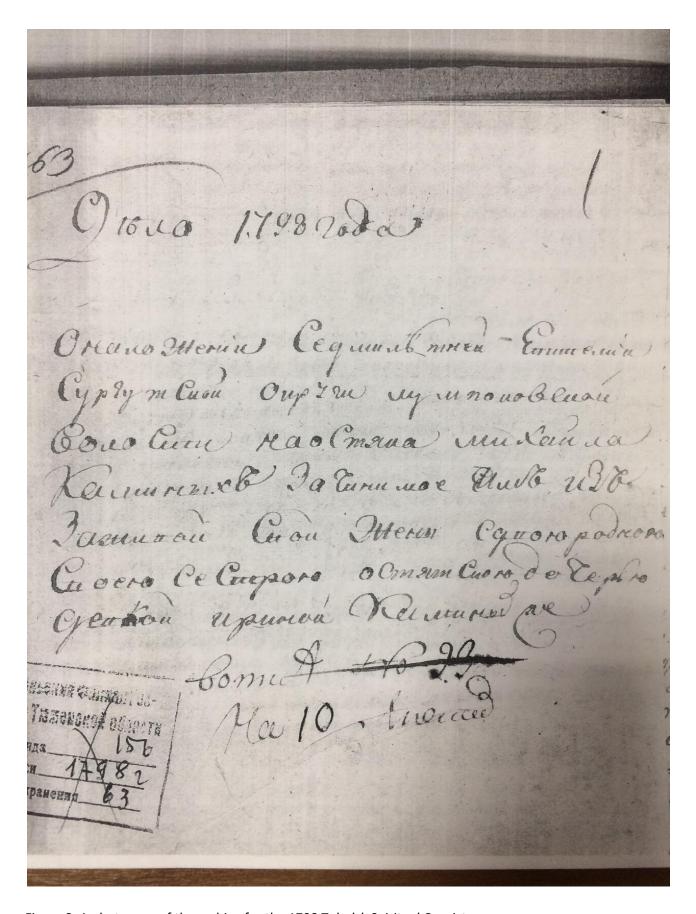


Figure 2. A photocopy of the archive for the 1798 Tobolsk Spiritual Consistory case.

If a woman married a man who belonged to another clan, she often lost the right to inherit her family's property. On 16 November 1882, the Obdorsk Samoyeds Uprava examined case No. 11 'at the request of Samoyedin Van Hazerumin on the illegal inheritance of Indian salms by Vanazi Ermetdin's wife' (Kirichenko & Zibarev, 1970, p. 32). After her husband's death, Avdotya Ermetdina married a man from the Aders clan and lost the right of inheritance to the property owned by her husband. Because her daughter also married a man from the same clan [her mother's new husband's clan], she kept her right to inherit part of her father's money (Kirichenko & Zibarev, 1970, p. 32).

Sometimes the decision was made in favour of a woman claiming inheritance. However, she would usually receive a much smaller share of the property compared to men, especially when a reindeer herd was among the property to be divided. On 11 January 1883, the Obdorsk Samoyeds Uprava examined case No. 12 'on the seizure of samoyed Nain's reindeer by his son Khyena without sharing inherited herd with his sister' (Kirichenko & Zibarev, 1970, pp. 32–33). Marya married a man from another clan, and after her father's death, she claimed part of the inheritance. The Uprava found her request 'deserving respect, and if 50 reindeer are taken from Khyena in her favour, it will not make Khyena's household poorer, since he inherited 800 reindeer. It was decided to oblige Khyena to give 50 reindeer to the sister' (Kirichenko & Zibarev, 1970, pp. 32–33).

The position of a woman could be even more complicated by the fact that after marriage, her property was owned by her husband. Her reindeer were joined to her husband's family's herd, and they grazed together. A widow could manage her own property. However, if she wanted to get back her reindeer and run her household independently, she had to prove her right to do so to the courts. It was difficult to identify reindeer in the joint family herd since they had the same markings. Moreover, relatives usually tried to hide the real number of reindeer belonging to a woman and make up excuses for her losses. This is confirmed by case No. 18, examined by the Obdorsk Samoyeds Uprava on 8 January 1886:

The widow Maneko, who was Vyla's sister, learned that after her father Khade Parazi's death, 100 reindeer, a chum, sledges and other property (insignificant) remained. All that has been inherited by her husband Vyla.... As a widow, she initially managed this property, but getting bored of listening to constant complaints from her husband's brothers Sobi and Piff's wives that she was not rich and had little of her own, as well

as enduring their oppression, Maneko... took her own 30 reindeer and moved in with her relatives, her brother samoyed Khudin.... Vyla's brothers Sobi and Piff kept on owning reindeer and the other property left.... After Vyla's death, about 600 reindeer remained.... Sobi and Piff responded that because Maneko returned to her former family... they took the responsibility of Vyla's remaining unattended property, mainly reindeer. Some of those reindeer were sold to cover Vyla's debts, some reindeer were used to feed their family and also their nephew Hade joined them. So, the remaining reindeer were kept together with their herds.... Now they have in total 500 reindeer, and it is difficult to identify how many of those are their own or earlier belonged to Vyla's herd. Witness Molich confirmed that Sobi and Piff had marked all reindeer with the same signs. Finally, it was decided to give 50 reindeer to Maneko, and the rest of the remaining reindeer were to be inherited by Vyla's son Hade. (Kirichenko & Zibarev, 1970, pp. 38–40)

Clearly, in the 18th to 19th centuries, women's civil, political and social rights were limited, which emphasised gender inequalities and their subordination to men. This was primarily the result of their traditional lifestyles and cultural values. If a husband and wife's relationship was unhappy, the woman was in a completely insecure position, unable to protect herself from physical violence or to claim the right to own and manage her property, as male reindeer herders did.

In the 20th century, this situation started to change. At the beginning of the 21st century, there was a significant strengthening of the legal protections of women in traditional reindeer herding communities due to their protection under the common legal field of the Russian Federation, which guarantees gender equality. Nevertheless, several issues still need to be addressed: the protection of labour rights (official employment in connection with the performance of women's reindeer husbandry duties) and increasing women's social protections (retirement benefits). There has also been an increasing trend for women to emigrate from the tundra in search of a better life. These issues are addressed in the subsequent sections of this chapter.

Demographic Shifts in Indigenous Communities: Statistics

Gender Structure of Indigenous Communities

There has been an increase in the gender disproportion of the population of the Arctic zone of Western Siberia: the share of women (non-significantly) decreased from 53.1% in 2015 to 52.7% in 2018. However, the number of women between the ages of 0 and 15 dropped by 4.6% during this time period. While the elderly population has increased in both gender groups, it has been less dramatic for women (+15.7%) compared to men (+21.8%) (Table 1).

Table 1. Demographics of the Indigenous small-numbered peoples of the North in the YNAO

Indicators	2015	2016	2017	2018
1. Indigenous small-numbered peoples of the North (individuals)	47,541	48,106	48,735	48,606 /
				32,324*
Nenets	34,466	34,954	35,377	35,359
Khanty	10,866	10,936	11,116	11,089
Selkups	2,209	2,216	2,242	2,158
Male	22,276	22,560	22,847	22,882
0–15 years	8,264	8,247	8,311	8,262
16–59 years	12,860	13,098	13,141	13,217
> 60 years	1,152	1,215	1,395	1,403
Female	25,265	25,546	25,888	25,724
0–15 years	8,257	7,958	8,165	7,878
16–59 years	14,560	14,929	14,953	14,871
> 60 years	2,448	2,659	2,770	2,833
Nomadic Indigenous peoples of the North	13,978	13,921	13,876	13,365
				(9,657**)
Nenets	12,869	13,035	13,086	12,628
Khanty	957	725	661	604
Selkups	152	161	129	133
Semi-nomadic Indigenous peoples of the North	3,402	4,574	5,055	5,174
Nenets	3,209	2,801	3,092	3,403
Khanty	459	1,339	1,516	1,390
Selkups	209	434	447	379
2. Traditional Indigenous households (nomadic and semi-	12,952	13,401	13,978	13,716
nomadic)				
nomadic households	3,007	3,264	3,370	3,315

***	2,908	***	3,280
1,043	1,633	1,793	1,831
***	1,464	***	1,573
	1,043	1,043 1,633	1,043 1,633 1,793

^{*}adults (without children)

Data source: Edinaja informacionnaja sistema po modelirovaniju i prognozirovaniju social'no-jekonomicheskogo razvitija korennyh malochislennyh narodov Severa lamalo-Neneckogo avtonomnogo okruga [Unified information system for modelling and forecasting the socio-economic development of the Indigenous peoples of the North of the Yamal-Nenets Autonomous Okrug], 2018.

Migration Trends

There has been a high rate of emigration of the young female population from rural to urban areas (Figs. 3 and 4), which is associated with changing traditional lifestyles. More young people (especially women) are seeking a university education. These are the outcomes of the transition processes in the Indigenous communities.

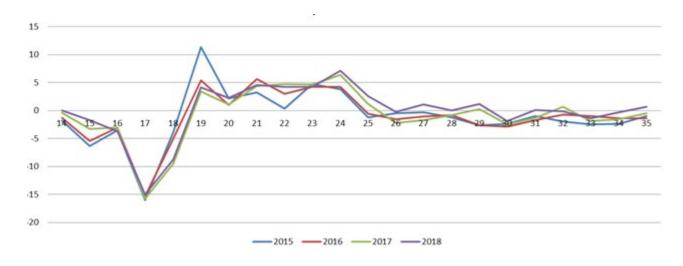


Figure 3. Emigration of men (15–35 years) from rural areas of the YNAO.

^{**} adults (without children) involved in traditional livelihoods

^{***} missing data

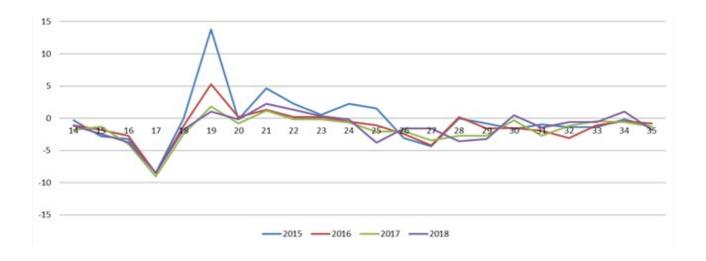


Figure 4. Emigration of women (15–35 years) from rural areas of the YNAO.

Numerous women have begun to follow in the footsteps of other successful Indigenous women by earning a university education, securing a good job and high position in society. Praskovia Filant, the president of the Association of Reindeer Herders of the YNAO (Fig. 5), confirmed that the traditional lifestyle of the Indigenous peoples is modernising, and women now have more choices to exercise their civil, political and social rights:

My origin is Khanty. I was born in the tundra to a family of reindeer herders, fishermen and hunters. My parents encouraged me to get a good education. Thanks to them I have two degrees – a Bachelor in Law and a Master of Economics. Now I can participate in the political life of my region as effectively as men can. I feel that it is my civic duty to help Indigenous peoples and to do my best to make their lives better. I established the Association of Reindeer Herders in the YNAO to consult and defend their rights in court. Recently, I joined the regional and federal governmental commissions on the development of the Arctic region. Now I am sharing my experiences while meeting people and broadcasting on television at the regional TV programmes speaking Indigenous languages (Khanty, Nenets, etc.). Every year, more and more Indigenous women want to follow my example, get a university education and a good, well-paid job. They are not willing to continue this hard life in the tundra. (Personal communication, 15 January 2021)

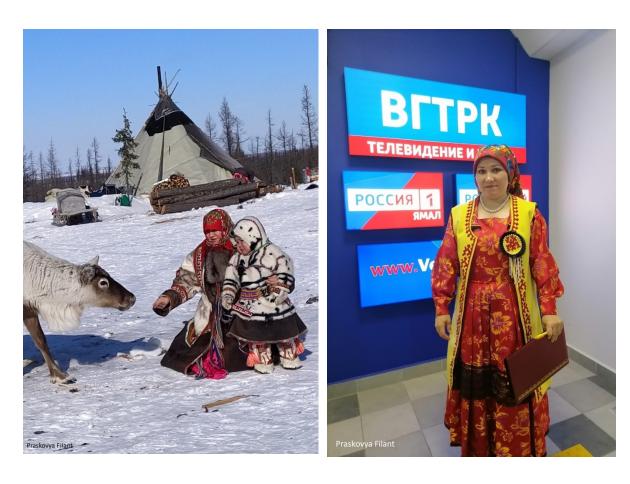


Figure 5. Praskovia Filant in the Priuralskaya tundra (left) and on TV (right).

Indigenous Women's Marriage Choices

Khlomich (1995) noted the following features of the Nenets family structure: exogamy (marriages within a clan were strictly prohibited), male dominance in the family, the existence of a special territory, patrimonial sacrificial places and cemeteries, collective production and distribution methods of running a household, the custom of patrimonial mutual help, the importance of patrimonial names, levirate and the authority of the elderly. The clan determined the family's lifestyle and its members' religious beliefs and customs (Khlomich, 1995). These exogamy cultural trends made Nenets women more open to getting married to non-Indigenous men (i.e., Russians).

A cluster analysis of 1121 Nenets–Russian marriages in the Tazovsky and Gyda settlements revealed that the frequency of these marriage bonds has increased over the previous three generations from a rate of 1.3% in Generation I to 2.6% in Generation II and 4.8% in Generation III ($\chi^2 = 6.7$; p = 0.009). The increasing frequency of Nenets–Russian marriages even in the third (current) generation is interesting (Fig. 6). When analysing the structure

of marriages between Nenets and Russians in the Tazovsky and Gyda settlements, the most frequent type of marriage was between a Russian man and a Nenets woman ($\chi^2 = 4.0$; p = 0.05). Additionally, 33 cases of marriages between close relatives (mostly cousins) were revealed, which accounted for 3.1% of marriages in the Gydanskaya tundra, 4.5% in the Nakhodkinskaya tundra and 2.9% in the Tazovskaya tundra.

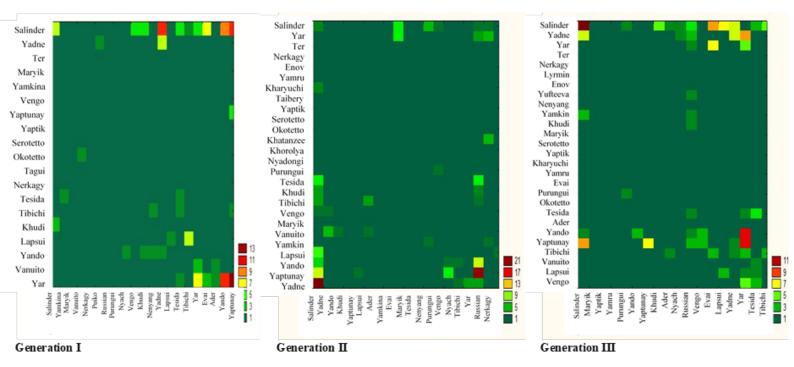


Figure 6. Cluster analysis results for marriage bonds in the Tazovsky and Gyda settlements across three generations (N = 1121).

The significant increase in the frequency of marriages between Russians and Nenets in the current generation is likely the result of closer contact in settlements during school, receiving a similar level of education and spending more time working together. The evident disproportion, with marriages between a Russian man and a Nenets woman prevailing, is due to the easier adaptation of Nenets women to settlement life.

Nenets women, as a rule, tend to have a higher level of education than men, perform qualified work and prefer easier and more comfortable living conditions in the settlements to the harsh conditions of nomadic life (Bogdanova et al., 2019). Therefore, they are more likely to move to urban areas than men (Liarskaya, 2016). A similar trend has been observed in Scandinavia

(Adolfsson, 2016; Dahlström, 1996; Leibert, 2016). Women often encourage their children to get a university education and to enjoy the benefits of civilisation. These factors often contribute to the preference for marriages with Russian men rather than with other Nenets living in the tundra. Russian men often choose Nenets women because of the traditional relationship dynamics that are typical of Nenets families, especially female subordination and respect for men. Moreover, Skvirskaja (2018) noted that Russian men are more romantic in comparison with Nenets men, who are more pragmatic.

Nenets men have more difficulty adapting to life in settlements, are less likely to earn a basic education, tend to work in low-qualified jobs and more often have problems with alcohol after moving to settlements. Finally, the status of a reindeer herder is especially important to Nenets men. Thus, they tend to consider the traditional lifestyle to be more attractive and prefer to live in the tundra.

As a result of the current demographic processes in the tundra, there is a shortage of brides (with 67% of Indigenous peoples agreeing that there is a high shortage; Fig. 7) who are willing to live a traditional lifestyle. Thus, men are currently the keepers of this traditional lifestyle, while women prefer to follow urban trends (Bogdanova et al., 2019, 2021).

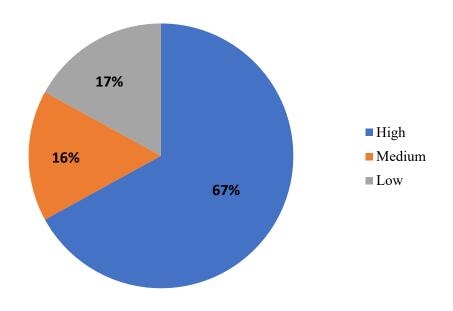


Figure 7. Results of the survey 'How the Indigenous Peoples Perceive "Shortage of Brides" in the Tundra Areas of the Yamalsky District of YNAO' (N = 100). (Zuev et al., 2017)

Traditional Lifestyle in Transition: Gendered Division of Labour

The most significant factors challenging gender asymmetries in the Indigenous reindeer herding communities are assimilation processes and the destruction of the traditional Indigenous family model (Baranov et al., 2014). The traditional lifestyle in the Arctic zone of Western Siberia is associated with traditional livelihoods (reindeer herding, hunting and fishery), nomadism in the tundra or living in settlements, consuming traditional foods (Ravna, 2019; Volžanina, 2009), having large families (more than five children for families living in settlements and more than nine children for families practising nomadism in the tundra; Bogdanova et al., 2021; Fig. 8) and extended family structures with multiple generations living together (Khariuchi, 2001). However, this traditional lifestyle of the Arctic Indigenous communities is undergoing transition, as indicated by the findings of ethnological and sociological research (Serpivo, 2016). That being said, the share of people involved in traditional livelihoods increased by 1.8% from 2015 to 2018, especially among the seminomadic Indigenous population (Table 1).



Figure 8. A family of reindeer herders (photo taken by author A. Lobanov).

The tundra is traditionally perceived by nomads as a men's space, and a woman is to be a wife, sister or daughter of a reindeer herder. In the past, there was a traditional division of gender roles in the household and ritual duties in a nomadic family. The woman kept house, cooked food, looked after the children, took care of the fire, washed, sewed and mended clothing. The man herded reindeer, caught fish, hunted and built sleighs (Burykin, 1999). These social structures have helped to maintain traditional values in these Indigenous communities (Bogdanova et al., 2021).

During the expeditions to the tundra areas of the YNAO from 2018 to 2020, the authors of this chapter interviewed 119 Indigenous women to analyse the gender division of labour in modern Indigenous reindeer herding households to determine if there has been a change in gender roles in these families. Over 90% of respondents stated that all duties concerning reindeer herding (choosing a nomadic route, herding and taking care of the reindeer, slaughtering reindeer, sorting out reindeer, selling reindeer products, negotiating the price for reindeer meat, etc.) are still considered to belong to males. Women generally only assisted men (husbands, brothers and fathers) with processing reindeer products and freezing, drying and smoking venison. However, most of household duties earlier considered to be female duties are now shared between women and men: raising and teaching children, buying food, caring for elderly relatives, caring for ill family members, filing documents with local authorities, foraging for mushrooms and berries, assembling and disassembling a traditional mobile *chum* (an Indigenous tent made of reindeer skin and wood) and chopping trochee (Fig. 9). In an interview (RAIPON, 2016), one Northern Indigenous man stated:

Life in the High North is 80% dependent on women. If there is a woman in the *chum*, the owner is calm, knowing that the hostess in the *chum* will protect the fire and hearth, which creates comfort. A woman is the happiness of life and life itself, the preservation of national traditions.



Figure 9. A Khanty woman reindeer herder feeding a reindeer (photo taken by author K. Filant).

While some traditionally male duties are now shared by women (e.g., earning money), the traditional division of labour in Indigenous reindeer herders' households is still partly maintained. Women are responsible for running the household (cleaning, tidying up and washing), looking after kids, cooking, fishing, keeping the fire going in the chum, collecting wood for the fire, melting fat, processing reindeer carcasses and skins and sewing clothes (Figs. 10–13). Some modern female duties include taking family members to medical facilities, handling all paperwork related to the family budget and business and applying for social subsidies. Men continue to be in charge of the most difficult duties: reindeer herding and repairing vehicles and sledges. They are also still the primary decision makers in the family. Only 13% of married couples interviewed confirmed that they make all decisions regarding family issues together.



Figure 10. Indigenous women gathering wood for the fire (photo taken by author K. Filant).



Figure 11. An Indigenous woman reindeer herder sewing clothes from reindeer skin (photo taken by author K. Filant).



Figure 12. A Nenets woman reindeer herder cooking meals in the chum (photo taken by author A. Lobanov).



Figure 13. Nenets women reindeer herders processing reindeer products in the tundra after slaughter (photo taken by author A. Lobanov).

Some property rights in reindeer herding continue to be impacted by traditions. In most individual reindeer herding households, a reindeer is not the subject of official property law. When inherited, a reindeer herd can be divided by family members following traditional customs. For example, Galina, a wife of a reindeer herder, confirmed that only sons can traditionally inherit the reindeer herd (the eldest son usually gets the smallest portion of reindeer because he has likely already accumulated reindeer from working with this father) while daughters can get a chum, sledges and some utilities for a household.

Nowadays, Indigenous peoples integrate innovations (e.g., the Internet) and modern devices (electric generators, snowmobiles, mobile phones, television sets, etc.) into their model of the family economy. However, this has not brought substantial changes to life for women in the tundra, who still have to endure difficult work and conditions, such as extracting fuel from under the snow, carrying heavy loads, enduring hypothermia and long sleigh rides and moving to a new pasture every 3–7 days, all of which can increase the rate of spontaneous miscarriages. Thus, life on the tundra for women continues to be associated with hard work and a high health risk. In contrast, life for women in remote settlements has become more comfortable thanks to the conveniences of houses (central heating, running water and electricity) and modern household items (fridges, stoves, televisions, etc.; Bogdanova et al., 2021). Therefore, young Indigenous women who have experienced settled life prefer to move to settlements and marry non-Indigenous men.

Better education among Indigenous women has led to a reduced frequency of closely related marriages since Indigenous peoples have more opportunities to meet partners from other areas while studying at boarding schools. Previous research found that Indigenous women in the tundra had a lower educational level (75.1% of them had no formal schooling at all) than Indigenous and non-Indigenous women residing in settlements (40.2% and 11.1%, respectively, had no formal schooling) (Bogdanova et al., 2021). This lack of education results in them following a traditional nomadic or semi-nomadic lifestyle. However, the People's Programme of the Indigenous Minorities of the North in the YNAO guarantees governmental support to Indigenous peoples pursuing a secondary, vocational and higher education (Ob utverzhdenii Narodnoj programmy [On approval of the People's Programme], 2017). Such programmes have increased the level of education among women, providing them with resources to change their lives and assuring their right to education.

The unfolding bride shortage in the tundra and a prevalence of unmarried women in national settlements has also been demonstrated for other Arctic regions, such as the Kola Peninsula, Evenkia, Yakutia, Chukotka and Kamchatka (Gavrilova, 1997). Well-educated women prefer to move to the settlements, adapt to the urban environment, find work and get married to non-Indigenous men. This can also result in modified sexual culture among Indigenous women living in the settlements (Bogoyzvlenskii, 2000). Maintaining a nomadic household requires both a man and a woman, which strengthens the institution of the family and encourages high reproduction among Indigenous peoples. However, the difficult life of nomadic women in the tundra is less attractive for women who would prefer to move to settlements or cities. The gender shift in the tundra thus entails a high risk of depopulation in the Indigenous population (Bogdanova et al., 2021; Burykin, 1999), as demonstrated by the emigration trends among female and male Indigenous populations (Figs. 3 and 4).

Women's Reproductive Choices

The post-Soviet period in Russia (1993–1997) was associated with an economic crisis and lack of resources to support Indigenous women's reproductive health, followed by an increase in infant mortality rates up to 34.3 per 1,000 (Volžanina, 2007b). From 1998 to 2002, policy initiatives focusing on Indigenous peoples implemented by RAIPON in collaboration with regional governments (e.g., subsidy programmes for Indigenous families) led to a decline in infant mortality rates to 27.6 per 1,000 (Volžanina, 2007b). Russia's current social policy encourages women to have large families with many children since they can obtain benefits for childbirth ('maternal capital', similar to 'baby bonus' programmes in Canada; Fig. 14). This has had a significant impact on the demographic policy in Russia. However, Arctic Indigenous women living in remote areas still face unresolved barriers to preserving their reproductive health: insufficient access to perinatal maternity care, lack of high-qualified medical staff in Indigenous communities, difficulties with the evacuation of childbearing women from remote areas. This emphasises the importance of modernising the health care system to include transporting pregnant women from the tundra to municipal hospitals to give birth, including by air ambulances in emergency cases. According to Russian government officials, the Indigenous population is increasing because of the effective and progressive policies of the authorities in the region (Kornilov et al., 2013), including sufficient access to medical care services. To provide sustainable development for Indigenous minority peoples

in the YNAO, the governmental programme on sustainable development of the Indigenous minority peoples of the North in the Yamal-Nenets Autonomous Okrug for 2018–2022 was developed. Additionally, 14 regional government programmes provide social guarantees, such as free medication, favourable prosthodontic aid and food for pregnant women and mothers with children under three years of age (Bogdanova et al., 2021).



Figure 14. A young Nenets woman reindeer herder with a baby in the chum (photo taken by author A. Lobanov).

Indigenous Women's Labour Rights: Challenges of Social (In)Security

Indigenous women assist men in reindeer herding and share most of the household duties, but their labour rights are still limited. Most Indigenous women (especially those in individual nomadic reindeer herding households) are officially unemployed. This jeopardises their future social security. If they retire at the age of 45 years old and have not had official employment for the previous 20 years in the High North, Indigenous women reindeer herders will not

receive a pension or any social payments provided for elderly peoples (Federal'nyj zakon 'O trudovyh pensijah v Rossijskoj Federacii' [Federal Law of the Russian Federation on Labour Pensions], No. 173-FL, 2001).

In the Soviet period, the labour rights of women reindeer herders were strengthened. In 1980s, the profession of a reindeer herder was first introduced in the *Unified Tariff and Qualification Reference Book of Jobs and Professions of Workers* (ETKS), Issue 70 'Jobs and Professions in Animal Husbandry' (1983). There were five categories of reindeer herders. The lowest (fifth) category included traditionally female duties in reindeer herding (cooking, cleaning a house, repairing clothes and shoes and other housekeeping work). As a result, the official employment for women engaged in reindeer husbandry was assured. Additionally, the wives of reindeer herders could avoid the administrative punishment for 'parasitism' implemented for non-working citizens in the USSR. Since 2008, the wives of reindeer herders in the YNAO have been officially employed as reindeer herders of the fifth (lowest) category. They have regularly petitioned to be upgraded to at least the fourth category. Meanwhile, men are employed as reindeer herders of the highest (first or second) categories.

During the Soviet period, the profession of chumworker (*chumrabotnitsa*) was first introduced. The etymology of this word is directly linked to the primary place where a woman reindeer herder works – the *chum*. In 2016, this was added to the legislation of some Arctic regions. For example, Article 2 of the regional NAO Law on Reindeer Husbandry (No. 278-OZ, 2016) states:

A chumworker (*chumrabotnitsa*) is an individual who is not directly involved in herding reindeer, but is responsible for maintaining a traditional lifestyle, performing work cooking, repairing clothes and shoes, making skis with fur lining, removing skins and processing carcasses, preparing fuel and ice, cleaning a house, assembling and disassembling a chum and doing other work related to ensuring the social life of reindeer herders in the areas of reindeer pastures.

Article 16 of the regional NAO Law on Reindeer Husbandry (No. 278-OZ, 2016) guarantees social support for chumworkers and reindeer herders.

The regional YNAO Law on Reindeer Husbandry (No. 34-ZAO, 2016) also added this profession in 2016.

However, the profession of a chumworker remains arbitrary since it is not included in the list of official professions approved by the federal government. Thus, women have no other choice but to be officially employed as reindeer herders of the third category. This gives them the opportunity to apply for early retirement and social pensions (though these are still minimal). This does not fully correspond to the duties of the wives of reindeer herders and does not fully guarantee their social rights and gender equality.

Even though women can be employed as reindeer herders of the third category, there is a more jeopardising challenge: many wives of individual reindeer herders (those who do not belong to a collective reindeer farm) are not and have never been officially employed. Thus, they face high social risks and insecurity. Thanks to the federal laws of the Russian Federation, they are guaranteed free access to medical and educational facilities. However, without official employment lasting 20 years, they do not have any pensions at the age of 45.

Recently, a potential solution for solving this issue of employment for individual women reindeer herders was created. In 2018, the Russian government first introduced the Federal Law of the Russian Federation on Experimenting to Establish a Special Tax Regime – A Tax for Professional Income (No. 422-FL, 2018). IN 2019, this law was first piloted in four regions of the Russian Federation. Later, in August 2020, its implementation began for all Russian regions. This law allows people who have no options for official employment to apply for an official self-employed (samozanjatyj) status. It is a special legal status of a person implementing special tax regime. He must pay a tax on professional income (4– 6%). This person is considered to be officially employed that makes him secured by the state social insurance system. Thus, applying it to women who are individual reindeer herders is also convenient because of a lack of paperwork (there are no obligations to submit a declaration of income annually; instead, this information can be sent over the Internet via a mobile application). They can register via the Internet at the federal tax service website or through the government's Internet portal for free, and there are no other insurance payments. Those individuals who receive an official status of self-employed (samozanjatyj) can then be eligible for a social pension (minimal retirement payments guaranteed by the government) in the future. However, they can increase their future pension by making regular insurance payments to the state pension fund.

Conclusions

Indigenous women reindeer herders' rights have been significantly strengthened in the 21st century. They can participate in political life and lobby for the rights of Indigenous peoples at the regional and federal levels. Further, the civil rights of Indigenous women reindeer herders are protected by federal and regional laws.

However, there are still some gaps in the social rights of women reindeer herders, specifically challenges regarding their labour rights. Their status as unemployed jeopardises their social security and does not guarantee a retirement pension in the future. However, there are some solutions that can be enacted through short- and long-term measures. The following are recommended to improve the labour rights of Indigenous women reindeer herders:

- Encourage women to apply for an official self-employed (samozanjatyj) status;
- Support cooperative forms of reindeer herding husbandry (i.e., peasantry farms) and employ women as reindeer herders;
- Encourage a semi-nomadic lifestyle for Indigenous women and create facilities in settlements for processing reindeer herding products that are managed by reindeer herders' families, as this will provide new opportunities for women to be employed through their family business;
- Organise production cooperatives for reindeer herders to develop facilities for deep processing of reindeer products and to increase the profitability of reindeer herding.

Acknowledgements: We would like to thank the women reindeer herders from the Indigenous communities and associations of the YNAO for their assistance and participation in the surveys. We are grateful to the researchers Sergei Zuev and Valery Kibenko of the Arctic Research Scientific Center of the YNAO for sharing their data on women's outmigration in the Yamalsky district. We also thank Oleg Sizov, researcher at the Laboratory of Integrated Geological and Geophysical Study and Development of Oil and Gas Resources of the Continental Shelf, Oil and Gas Research Institute RAS, for designing a map of the YNAO. We are grateful to Ildiko Asztalos Morell for her kind advice on the theory of gender analysis.

References

- Adolfsson, E. (2016). Fler män än kvinnor? En studie av könsobalans bland unga vuxna i Sveriges kommuner [More men than women? A study of gender imbalance among young adults in Sweden's municipalities] [Doctoral thesis, Örebro University]. http://www.diva-portal.org/smash/get/diva2:936225/FULLTEXT01.pdf.
- Andronov, S. V., Bogdanova, E. N., Lobanov, A. A., Voronenko, A. G., Gritsenko, V. N., Detter, G. P., Kobelkova, I. V., Kochkin, R. A., Lobanova, L. P., Popov, A. I., Fedorov, R. Yu., Filant, K. G., Filant, P. N., Yuzhakov, A. A. (2020). *Prodovol'stvennaja bezopasnost' korennyh narodov Arkticheskoj zony Zapadnoj Sibiri v uslovijah globalizacii i izmenenija klimata [Food security of the Indigenous peoples of the Arctic zone of Western Siberia in the context of globalization and climate change]*. Kira Publishing House. 373 p.
- Asztalos Morell, I., & Bock, B. (Eds). (2007). *Gender regimes, citizen participation and rural restructuring*. Elsevier.
- Baranov, A. A., Namazova-Baranova, L. S., Albitsky, V. Y., Terletskaya, R. N. (2014). Tendencii mladencheskoj i detskoj smertnosti v Rossijskoj Federacii v 1990–2012 gg. [Trends of infant and child mortality in the Russian Federation in the period of 1990–2012]. *Vestnik Rossijskoj akademii meditsinskikh nauk, 69*(11–12), 31–38.
- Bogdanova, E., Andronov, S., Lobanov, A., Kochkin, R., Popov, A., Asztalos Morell, I., & Odland, J. Ø. (2021). Indigenous women's reproductive health in the Arctic zone of Western Siberia: Challenges and solutions. *International Journal of Circumpolar Health*, 80(1). https://doi.org/10.1080/22423982.2020.1855913.
- Bogdanova, E. N., Andronov, S. V., Lobanov, A. A., Popov, A. I., Kochkin R. A., & Asztalos Morell, I. (2019). Demograficheskie tendencii dinamiki populjacii nencev v Zapadnoj Sibiri v uslovijah transformacii tradicionnogo obraza zhizni [Demographic trends in the dynamics of the Nenets population in Western Siberia in the conditions of transformation of the traditional lifestyle]. *Ekonomika i predprinimatel'stvo*, *12*(11), 1307–1312.
- Bogdanova, E. N., Zadorin, M. Y., Lobanov, A. A., Popov, A. I., Andronov, S. V., & Kochkin, R. A. (2018). The right to health protection of Indigenous peoples of the Russian Arctic: "Collision field" and search for new solutions. *Tomsk State University Journal*, 432, 210–217. https://doi.org/10.17223/15617793/432/28.

- Bogoyzvlenskii, D. (2000). Russia's Northern Indigenous peoples: Are they dying out? In Hunters & gatherers in the modern world: Conflict, Resistance and Self-Determination.
 P. P. Schweitzer. M. Biesele and R. K. Hitchcock (Eds.) (pp. 327–340). Berghahn Books.
- Burykin, A. (1999). «Zhenskoe lico» intelligencii sovremennyh malochislennyh narodov Severa Rossii i ego vzgljad na tradicionnuju kul'turu ['Woman's face' of the intelligentsia of the modern minority peoples of the North of Russia and his view of traditional culture]. In *Zhenshhina v mire muzhskoj kul'tury: put' k sebe* [Woman in the world of male culture: The way to oneself] (pp. 39–42). Nevsky Institute of Language and Culture.
- Dahlström, M. (1996). Young women in a male periphery: Experiences from the Scandinavian North. *Journal of Rural Studies*, 12(3), 259–271. https://doi.org/10.1016/0743-0167(96)00018-6
- Federal'nyj zakon "O trudovyh pensijah v Rossijskoj Federacii" [Federal law of the Russian Federation on labour pensions]. Sobranie Zakonodatel'stva Rossijskoj Federatsii [SZ RF] [Collection of Laws of the Russian Federation], 2001 (revised 2020), No. 173-FL.
- Federal'nyj zakon "O provedenii jeksperimenta po ustanovleniju special'nogo nalogovogo rezhima "Nalog na professional'nyj dohod" [Federal law of the Russian Federation on experimenting to establish a special tax regime A tax for professional income], Sobranie Zakonodatel'stva Rossiĭskoĭ Federatsii [SZ RF] [Collection of Laws of the Russian Federation], 2018, No. 422-FL.
- Gavrilova, I. (1997). Problemy malochislennyh narodov Severa Rossii [Problems of the small-numbered peoples of the North of Russia]. *Predstavitel'naja vlast': monitoring, analiz, informacija, 1*(18).
- Edinaja informacionnaja sistema po modelirovaniju i prognozirovaniju social'nojekonomicheskogo razvitija korennyh malochislennyh narodov Severa IamaloNeneckogo avtonomnogo okruga [Unified information system for modelling and
 forecasting the socio-economic development of the Indigenous peoples of the North of
 the Yamal-Nenets Autonomous Okrug] (2018).
 http://kmns.yanao.ru/dkmns/Account/Login?ReturnUrl=%2fdkmns%2f.
- Edinyj tarifno-kvalifikacionnyj spravochnik rabot i professij rabochih. Vypusk 70. Raboty i professii rabochih v zhivotnovodstve [Unified Tariff and Qualification Reference Book

- of Jobs and Professions of Workers. Issue 70. Jobs and professions in animal husbandry] (1983). https://etks.info/etks/70.
- Khariuchi, G. P. (2001). Traditsii i innovatsii v zhizni nenetskogo etnosa [Traditions and innovations in the culture of the Nenets ethnos]. Izd-vo TGU.
- Khariuchi, G. P. (2010). Nenetskaia zhenshchina v nauke: K voprosu ob osobennostiakh issledovaniia sakral'noi sfery [Nenets women in science: On special features of the study of the sacred sphere]. *Etnograficheskoe Obozrenie*, *3*, 44–53.
- Khlomich, L. V. (1995). Nentsy: Ocherki traditsionnoi kul'tury [The Nenets: Essays on traditional culture]. Russkii Dvor.
- Kirichenko, P. V., & Zibarev, V. A. (Eds.). (1970). Obdorskoj upravy kniga dlja zapisi prigovorov po tjazhbam, sporam i prostupkam inorodcev (1881-1901 gg.). Iz istorii obychnogo prava i suda obdorskih nencev i hantov XIX nachala XX vv. [Obdorsk Uprava book for recording sentences in litigation, disputes and misdeeds of inorodtsy (1881–1901). From the history of customary law and the courts of the Obdorsk Nenets and Khanty of the 19th early 20th centuries]. Izd-vo Tomskogo universiteta.
- Kornilov, G. G., Kornilov, G. E., Mikhalev, N. A., Orudzhieva, A. G. (2013). Naselenie Iamala v XX veke: istoriko-demograficheskij analiz [*The population of Yamal in the twentieth century: Historical and demographic analysis*]. UrO RAN, GKU JANAO.
- Kvashnin, I. N. (2002). Etnodemograficheskaia kharakteristika naseleniia Iarsalinskoi sel'skoi administratsii Iamalo-Nenetskogo avtonomnogo okruga [Ethnic and demographic characteristics of the population of the village administration of Yarsalinskii in Yamalo-Nenets Autonomous Okrug]. In V. R. Cibul'skij, A. V. Matveev (Eds.), *Problemy vzaimodeistviia cheloveka i prirodnoi sredy* (pp. 47–50). IPOS SO RAN.
- Kvashnin, I. N., & Volzhanina, E. A. (2003). Nekotorye aspekty etnicheskikh protsessov u korennogo naseleniia nizov'ev r. Nyda [Some aspects of ethnic processes in the Indigenous population along the lower reaches of the Nyda River]. In A. N. Bagashev (Eds.), *Problemy vzaimodeistviia cheloveka i prirodnoi sredy* (pp. 82–85). IPOS SO RAN.
- Leibert, T. (2016). She leaves, he stays? Sex-selective migration in rural East Germany. *Journal of Rural Studies*, 43, 267–279. https://doi.org/10.1016/j.jrurstud.2015.06.004.
- Liarskaya, E. V. (2010). Zhenshchiny i tundra: Gendernyi sdvig na Iamale? [Women and tundra: A gender shift in Yamal?]. *Antropologicheskii Forum*, 13, 3–38.

- Liarskaya, E. V. (2016). Someone also needs to live in the city: Some features of the transformation of the social structure of the Nenets of the Yamal. *Ethnographic Review*, 1, 54–70.
- Lobanov, A. A., Andronov, S. V., Popov, A. I., Kochkin, R. A. (2012). *Chelovek. Ljogkie. Krajnij Sever* [*Human. Lungs. High North*]. GKU YANAO Arctic Research Scientific Center.
- Marshall, T. H. (1950). Citizenship and social class. Cambridge University Press.
- Nabok, I. L., & Serpivo, S. E. (2017). Transformacija zhenskogo prostranstva tradicionnoj kul'tury nencev k nachalu XXI veka [Transformation of female space of traditional culture of the Nenets up to the beginning of the XXI century]. *Vestnik arheologii, antropologii i etnografii, 1*(36), 110–117.
- Ob utverzhdenii Narodnoj programmy korennyh malochislennyh narodov Severa v Iamalo-Neneckom avtonomnom okruge [On approval of the People's Programme of the Indigenous Minorities of the North in the Yamal-Nenets Autonomous Okrug], 2017, No. 132-PG. http://docs.cntd.ru/document/543538580.
- Popova, A. G. (2004). Zhenshchiny Severnykh men'shinstv: Mezhdu stoibishchem i gorodom [Women of Northern minorities: Between a nomad camp and a city]. In L. I. Vinokurova, A. G. Popova, S. I. Boiakova, & E. T. Miarikianova (Eds.), *Zhenshchina Severa: Poisk novoi sotsial'noi identichnosti* (pp. 163–187). Nauka.
- Popova, G. N. (n.d.). *Peoples of Yamal*. http://gcbs.ru/cbs/pub/narody/nency/narody_yamala.htm.
- Ravna, Z. V. (2019). "Catching a child": Giving birth under nomadic conditions: The methods of pre- and postnatal care of the Nenets mothers and babies. *International Journal of Circumpolar Health*, 78(1). https://doi.org/10.1080/22423982.2019.1586275.
- Russian Association of Indigenous Peoples of the North (RAIPON). (2016). Akcija "Zhenshhiny Severa: ot hozjajki chuma do politika" [Action "Women of the North: From the mistress of the plague to the politician."]. http://raipon.info/info/project/2368/.
- RAIPON. (2018). O proekte "Deti Arktiki. Doshkol'noe obrazovanie" [About the project "Children of the Arctic. Preschool education"]. http://www.raipon.info/kids/about.php.
- Serpivo, S. E. (2016). Zhenskoe prostranstvo v kul'ture nencev [Women's space in the culture of the Nenets]. Istoricheskaia illiustratsiia.

- Skvirskaja, V. (2018). Neneckij brak v sovetskom i russkom stiljah: politjekonomija zhelanija i sopernichajushhie jemocii matrimonial'nyh otnoshenij ['Nenets marriage': the political economy of desire and matrimonial emotions]. *Etnografia*, *1*, 175–184.
- Strategija razvitija Arkticheskoj zony Rossijskoj Federacii i obespechenija nacional'noj bezopasnosti na period do 2035 goda [Strategy for the development of the Arctic zone in the Russian Federation and ensuring national security for the period until 2035], Sobranie Zakonodatelstva Rossijskoj Federatsii [SZ RF] [Collection of Laws of the Russian Federation], 2020, No. 645.
- Tourist Information Exchange System (SOTY). (2015). Etnicheskij sostav naselenija. Iamalo-Neneckij avtonomnyj okrug [Ethnic composition of the population: Yamal-Nenets Autonomous Okrug]. https://www.nbcrs.org/regions/yamalo-nenetskiy-avtonomnyy-okrug/etnicheskiy-sostav-naseleniya.
- Vladimirova, V. (2018). Security strategies of Indigenous women in Nenets Autonomous Region, Russia. *Polar Geography*, 41(3), 164–181. https://doi.org/10.1080/1088937X.2018.1489428.
- Vladimirova, V., & Otto Habeck, J. (2018). Introduction: Feminist approaches and the study of gender in Arctic social sciences. *Polar Geography*, 41(3), 145–163. https://doi.org/10.1080/1088937X.2018.1496368.
- Volžanina, E. A. (2005). Sovremennaja struktura nacional'no-smeshannyh brakov nencev Iamalo-Neneckogo avtonomnogo okruga [The modern structure of nationally mixed marriages of the Nenets of the Yamal-Nenets Autonomous Okrug]. *Vestnik arheologii, antropologii i etnografii, 6,* 234–248.
- Volžanina, E. A. (2007a). Etnodemograficheskie processy v srede nencev Iamala v XX-nachale XXI veka [Ethno-demographic processes among the Yamal Nenets people in the 20th and early 21st century] [Doctoral Thesis]. Russian Academy of Sciences.
- Volžanina, E. A. (2007b). Osnovnye tendencii izmenenija polovozrastnoj struktury sibirskih nencev v XX veke [The main trends in the change in the age and sex structure of the Siberian Nenets in the XX century]. In Y. V. Popkov (Ed.), *Korennye narody Iamala v sovremennom mire: Scenarii i koncepcii razvitija* [*Indigenous peoples of Yamal in the modern world: Scenarios and concepts of development*] (pp. 230–241). Nonparel.
- Volžanina, E. A. (2009). Demografija sibirskih nencev v pervoj treti XX veka [Demography of Siberian Nenets in the first third of the 20th century]. *Arheologija, etnografija i antropologija Evrazii*, *1*(37), 118–128.

- Volzhanina, E. A. (2010). Etnodemograficheskie protsessy v srede nentsev Iamala v XX nachale XXI veka [Ethnic and demographic processes among the Yamal Nenets in the XX century beginning of the XXI century]. Nauka.
- Walby, S. (1997). Gender transformation. Routledge.
- Zakon "Ob olenevodstve v Neneckom avtonomnom okruge" [Law on reindeer husbandry in the Nenets Autonomous Okrug], 2016, No. 278-OZ.
- Zakon "Ob olenevodstve v Iamalo-Neneckom avtonomnom okruge" [Law on reindeer husbandry in the Yamal-Nenets Autonomous Okrug], 2016, No. 34-ZAO.
- Zuev, S. M., Kibenko, V. A., Sukhova, E. A. (2017) Otchet po itogam zimnej jekspedicii po Iamal'skomu rajonu Iamalo-Neneckogo avtonomnogo okruga (Panaevskaja i Iamal'skaja tundry) [Report on the results of the winter expedition in the Yamal region of the Yamal-Nenets Autonomous Okrug (Panaevskaya and Yamalskaya tundra)]. GKU YANAO Arctic Research Scientific Center.