

International Northern Sea Route Programme (INSROP)

Central Marine Research & Design Institute, Russia



The Fridtjof Nansen Institute, Norway



Ship & Ocean Foundation, Japan



INSROP WORKING PAPER NO. 49-1996

Sub-programme IV: Political, Legal and Strategic Factors.

Project 4.1: Social and Cultural Impact on Indigenous Peoples of Expanded Use of the

Northern Sea Route

Title: Influence of the Northern Sea Route on Social and Cultural Development of

Indigenous Peoples of the Arctic Zone of the Sakha Republic (Yakutia).

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FOREWORD - INSROP WORKING PAPER

INSROP is a five-year multidisciplinary and multilateral research programme, the main phase of which commenced in June 1993. The three principal cooperating partners are Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia; Ship and Ocean Foundation (SOF), Tokyo, Japan; and Fridtjof Nansen Institute (FNI), Lysaker, Norway. The INSROP Secretariat is shared between CNIIMF and FNI and is located at FNI.

INSROP is split into four main projects: 1) Natural Conditions and Ice Navigation; 2) Environmental Factors; 3) Trade and Commercial Shipping Aspects of the NSR; and 4) Political, Legal and Strategic Factors. The aim of INSROP is to build up a knowledge base adequate to provide a foundation for long-term planning and decision-making by state agencies as well as private companies etc., for purposes of promoting rational decision making concerning the use of the Northern Sea Route for transit and regional development.

INSROP is a direct result of the normalization of the international situation and the Murmansk initiatives of the former Soviet Union in 1987, when the readiness of the USSR to open the NSR for international shipping was officially declared. The Murmansk Initiatives enabled the continuation, expansion and intensification of traditional collaboration between the states in the Arctic, including safety and efficiency of shipping. Russia, being the successor state to the USSR, supports the Murmansk Initiatives. The initiatives stimulated contact and cooperation between CNIIMF and FNI in 1988 and resulted in a pilot study of the NSR in 1991. In 1992 SOF entered INSROP as a third partner on an equal basis with CNIIMF and FNI.

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INSROP WORKING PAPER FOR PROJECT IV.4.1.

Influence of the Northern Sea Route on Social and Cultural Development of Indigenous Peoples of the Arctic Zone of the Sakha Republic (Yakutia)

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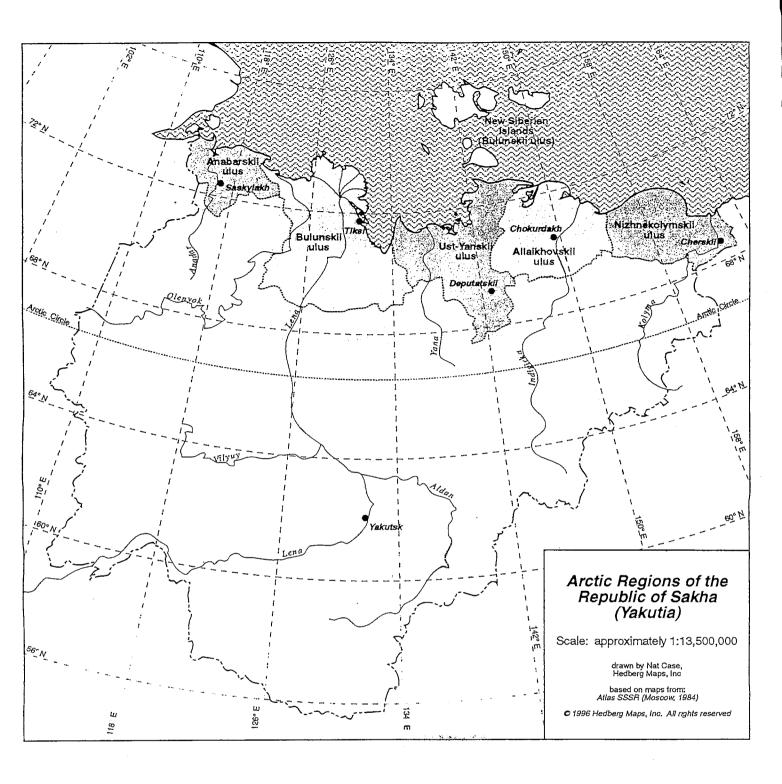


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1. Introduction¹

The Northern Sea Route (NSR) occupies a very important place in the transport system of the Arctic. The possibilities for gaining access to the economic potential of territories along the NSR make the sea route one of the main integrating factors in development of Arctic basin countries. The President of the Republic of Sakha (Yakutia), Mikhail E. Nikolayev, considers creation of an international sea line which would "reliably and effectively connect all northern regions of the planet and provide them entry into the world market" a priority task (Nikolayev, 1993). The NSR is often evaluated as a key factor of social, economic and cultural development of the Arctic region. The widely varied perspectives connected with a new conception of international use of the NSR necessitate deeper study of the influence of the NSR on the environment, economy and social development of the Polar regions.

This paper will describe the processes by which development of transportation along the NSR influences the aboriginal population and communities of the five Arctic coastal *ulus* ² (formerly *rayony* or districts) of the Republic of Sakha. The Russian literature, in contrast to American academia, treats the "Arctic" only as the Arctic Ocean coastline -- territory which is situated north of the Arctic Circle. In the Republic of Sakha (Yakutia) five coastal *ulus* are designated by law as Arctic. These five are the geographic focus of this paper: Allaikhovskii, Anabarskii, Bulunskii, Nizhnekolymskii, and Ust-Yanskii (see Map).

¹ This paper was prepared in Russian by a researchers' collective headed by S.I. Boyakova. The authors by section are: Introduction and Conclusion - S.I. Boyakova; "Demographic Processes" and "Public Health, Education, and Public Services" - V.B. Ignatieva; "Traditional Economic Systems" - B.V. Ivanov; "Social and Cultural Systems" - L.I. Vinokurova; "Government Structures and Systems" - T.S. Ivanova; "Archaeological and Cultural Resources" - S.P. Kistenyov and D.A. Shirina. The paper was translated into English by S.E. Vasilieva and T.K. Ermolaeva. Gail Osherenko prepared and edited this text from the English translation with reference to the Russian. We are grateful to Marjorie M. Balzer of Georgetown University for her thorough and thoughtful review of the paper, editorial suggestions, and corrections in the translation and to Deborah Robinson of the Institute of Arctic Studies for further editorial assistance in perfecting the English text.

² The term *ulus*, settlement or nomad camp, is now used to identify *rayony* or districts in the Sakha Republic (Yakutia). *Ulus* was the term accepted by Count Speransky in his reforms adopted by statute in 1822 for *inorodtsy* (non-Russian) administrative units within the Yakut *guberniia* (province). In pre-Revolutionary times, *ulus* referred to a native encampment and *ulus* with 15 or more families formed a Clan Administration (*rodovaia uprova*). See Marc Raeff, *Michael Speransky: Statesman of Imperial Russia 1772-1839* (Hague, Netherlands: Martinus Nijhoff, 1957), p. 272. Throughout the paper we use *ulus* to signify both singular and plural as the English variant "uluses" would be awkward.

The influence of the NSR on the Republic of Sakha reaches far beyond Sakha's Arctic coastline. The rivers of Sakha (the Lena, Yana, Indigirka, Kolyma, Anabar, Olenyok, etc.) connect the Arctic Ocean basin with more remote regions of the Republic. Together with the NSR, these rivers comprise a united water transport system. Thus, the whole geographical north of Yakutia (almost half of its territory) is influenced by the NSR. Transportation along this Arctic main line provisions 12 northern and Arctic ulus of the Republic.

As in other regions of the Russian North, the influence of the NSR upon indigenous peoples is revealed not solely in the direct effects of Arctic shipping, but also by the indirect effects of industrial development of the northern territories, which is closely connected with opening of the NSR. (See David G. Anderson, "Northern Sea Route Social Impact Assessment: Indigenous Peoples and Development of the Lower Yenisei Valley," INSROP Working Paper No. 18, 1995.) Political, legal, ecological, economic, and social problems of Arctic indigenous peoples are closely connected with northern transport and industrial development and should be examined as a complex. The importance of the NSR for the Republic of Sakha has changed with time according to shifts in central government policy with respect to its northern territories.

Regular sailing in the eastern sector of the Russian Arctic began later than in the western sector in response to military and strategic interests of Russia in this region. In 1911, in accordance with an order of the Russian government which was worried about American and Japanese expansion in the Northeast, the Far East company vessel DOBROFLOT embarked on the first commercial trip from Vladivostok to Kolyma. With government support, such trips with foodstuffs for the Kolyma region's population later became annual. At the same time, hydrographic work prepared the way for regular navigation in the region. After formation of the Yakut Autonomous Soviet Socialist Republic in 1922, the Republic's government tried to solve the problem of transport through the NSR. In the 1920s, having no proper fleet of its own, the Republic repeatedly petitioned the central government to open up the NSR near the Yakutia coastline and to extend the route from Vladivostok - Kolyma to the mouth of the Lena River. The new government of the USSR, however, was struggling to revitalize an economy left in disarray at the end of the civil war and had no real ability to help.

At the beginning of the 1930s before the Second World War, the central government of the USSR overestimated the importance of the North and its place in the macro structure of the all-union economy. The government looked to the rich deposits of gold, tin, tungsten, and other non-ferrous metals of the Northeast as a new source of raw materials for the country. The NSR administration was responsible for transport from the mines as well as for strategic military communications between the newly created Northern and Pacific navies of the USSR. In 1932, regular navigation along the whole NSR began, and in the following year the first 4,400 tons of supplies for Yakutia were delivered from Arkhangelsk. During these years, the NSR came to play a major role in delivery of goods for the Republic. By 1940, nineteen percent of imports passed through the port of Tiksi (constructed in 1933).

During World War II, more than half the food supplies, equipment, and consumer goods delivered to Yakutia were transported through the NSR (Belinskii, 1991). Coal, tin, and wood were exported from mines and enterprises built by camp prisoners of the Peoples' Commissariat of Internal Affairs. But by 1944, following study of the Arctic transportation experience, Moscow began gradually to reduce Arctic transportation and the influence of the NSR on remote regions of Northern Siberia and the Far East (Razvitie proizvoditel'nykh sil Severa. SSSR 1991). At the same time in Yakutia, export of wood, coal, and other minerals continued but was reoriented south. Transport along the NSR was reduced to 10 percent, and in the most recent years has declined to only 2 percent.

At the present time, the NSR and the entire Russian North are in a crisis state. The end of the Cold War and demilitarization of the Arctic have reduced the strategic role of the NSR. New policies of the Russian government toward its northern territories have reduced development of Arctic raw materials. Stagnation of production, destruction of administrative structures, and broken economic ties have all affected the northern economy even more than the economy of central areas. Under these conditions, the catastrophic reductions in Arctic transportation have reduced provisioning of the population of Sakha's Arctic *ulus* and provoked a situation that is close to crisis.

The research for this paper took place under conditions of serious political, economic, and social upheaval in the history of Russia and Sakha. The NSR is one of the factors which have

influenced changes in the economic relations, social structure, and environment of Arctic indigenous peoples.

The majority of the population (75 percent) of the five coastal Arctic regions of the Republic of Sakha are newcomers who came to the North on fixed, though renewable contracts. The indigenous population is composed of six Native groups: the Yakut (16%), Evenki (4%), Even (2.5%), Dolgan (1.2%), Yukagir (0.5%), and Chukchi (0.5%). In addition, Russian starozhily comprise 0.6% of the population. These starozhily (literally "old-residents") settled permanently in the region prior to the Russian revolution; their livelihood, like Native populations, is dependent on traditional use of natural resources. All of these peoples are compactly settled along the whole of the Arctic coastline of the Republic of Sakha. The Evenki are mainly concentrated in the Bulunskii and Anabarskii ulus; Evens, in the Ust-Yanskii, Nizhnekolymskii and Bulunskii ulus; Yukagir, in the Allaikhovskii and Nizhnekolymskii; Chukchi, in the Nizhnekolymskii; Russian Starozhily, in the Allaikhovskii and Nizhnekolymskii ulus. The Yakut are diffusely settled in all five regions. On the whole, in all ulus except Anabarskii, where the Yakut predominate, the majority of the population are of Russian or other Slavic origin.

Economically, the Bulunskii, Ust-Yanskii, and Nizhnekolymskii ulus may be considered industrial. The economy of the Bulunskii ulus is dominated by the Arctic seaport of Tiksi. Several commercial fishing enterprises operate in Tiksi, the largest of which is Bykovskii fish factory. The Ust-Yanskii district contains the largest mineral enriching complex for mines of the association "Kularzoloto" (Kular Gold) located in the Nizhneyansk Port. In the Nizhnekolymskii ulus, the construction industry has developed around the large seaport Zelyonyi Muis. The economies of the Allaikhovskii and Anabarskii ulus are based on traditional northern economies: reindeer breeding, fishing, and the fur trade.

Relevant prior work includes that of ethnographers G.M. Vasilevich, A.I. Gogolev, and V.A. Tugolukov; economists G.I. Ivanov, A.DE. Kurilyuk, and S.V. Slavin; historians M.I. Belov, V.M. Pasetskii, and D.A. Shirina; and ecologists N.G. Solmonov and D.D. Savvinov.

The scope and time limits of this study did not allow for detailed examination of all the processes that have taken place in the Republic of Sakha under the influence of the NSR. Rather,

some key problems were emphasized; namely, the modern demographic situation, the state of the environment, changes in the social and cultural systems of indigenous peoples, political, legal and social aspects of rights, and protection of the traditional economy and culture of Arctic indigenous peoples.

The following sources provided the main data used in this paper: (1) archival materials, (2) central and regional legislation, (3) statistical data, (4) documents of the republic's government and organizational structure, (5) published and unpublished scientific research works, and (6) periodical literature. In addition, the authors used data of early archeological and sociological research in the Arctic regions of the Sakha Republic. Analysis and interpretation of the data and literature are based on descriptive, analytical, and comparative methods. All data were evaluated for their authenticity and significance in addressing the task of this INSROP project. The paper does not provide a full and detailed review of the problem but rather a base and background for further research.

2. Demographic Processes

The Arctic zone of the Sakha Republic covers 593,900 sq. km. with a total population of 52,600 people (fewer than 9 people per sq. km.). The Arctic zone covers 19.1% of the Republic but held only 5.5% of its population in 1994.

Table 1. Population (thousands of people as of January 1)

<u> </u>							
	1931	1939	1959	1970	1979	1989	1994
Sakha Rep. Total	316.0	413.8	487.3	664.1	838.8	1094.1	1073.4
Arctic Zone Total	7.5	14.0	18.2	45.1	60.6	83.8	58.9
Allaikhovskii Anabarskii Bulunskii Nizhnekol Ust-Yanskii	1.1 1.2 2.4 0.9 1.9	1.7 1.8 5.2 2.3 3.0	2.4 1.4 10.2 4.2	3.8 1.9 12.6 11.4 15.4	5.2 2.3 15.2 12.2 25.7	5.4 3.9 17.6 14.0 42.9	4.8 3.7 13.2 10.7 26.5
% of Sakha pop. in Arctic Zone	2.3	2.7	3.7	6.8	7.1	7.7	5.5

Table 2. Population Density (per square kilometer)

	1939	1989	
Allaikhovskii	0.02	0.05	
Anabarskii	0.02	0.07	
Bulunskii	0.04	0.08	
Nizhnekol	0.05	0.2	
Ust-Yanskii		0.3	

Over several centuries of movement and adaptation to the natural environment, aboriginal people came to settle in this zone and to establish economic and cultural practices tied to particular localities that persist to the present despite changes occurring over the last century.

The Arctic zone is homeland to the majority of the Chukchi (84.4 %) and Yukagir (53.7%) living in the Republic of Sakha (according to the 1989 census). It is also home to 28.7% of the Even and 17.6% of the Evenki, whereas only a tiny percent of the Sakha or Yakut population (2.9%) of the Republic reside here. (Note that the Sakha/Yakuts have long outnumbered the other Native peoples of the region, see Table 3). The different groups are not evenly distributed throughout the territory. The majority of the Chukchi (77.7%) and over one third of the Yukagir (37.7%) live within the Nizhnekolymskii ulus. In the Allaikhovskii ulus, 5.9% of Chukchi and 13.6% of Yukagir dwell. The Even and Evenki live in small groups all across the Arctic zone. The scattered location of the nomadic or semi-nomadic Even and Evenki was determined by their subsistence way of life and dependent on seasonal migrations. The Even settled in a line of compact groups in the Allaikhovskii, Bulunskii, Nizhnekolymskii and Ust-Yanskii ulus; the Evenki, in the Anabarskii and Bulunskii ulus. The Yakut are represented in small numbers in all ulus of the Arctic zone.

In the 1920s, the number of non-indigenous peoples on the Arctic coast of Yakutia was insignificant. They were mainly composed of Russian *starozhily* and of a few newcomers. Of the

29,200 people counted in the three northern districts (Boulun, Verkhoyansk, and Kolyma) in the 1926-27 Economic Census of the Circumpolar North, only 1,900 were Russian.

As N.B. Vakhtin explains, "The question of nationality in the North is far from simple." The Russian *starozhily* (literally, "old residents") descended from Cossacks who arrived via the NSR and settled in the mouths of the Indigirka and Kolyma. They are as dependent on natural resources and traditional occupations for their livelihood as are the indigenous peoples. Vakhtin described the residents of the villages Pokhodst (*Pokhodchane*) and Russkoe Ustye (*Russkoustintsy*) to illustrate the complexity embedded within the simple division into "newcomers" and "locals." He noted:

[These villagers] constitute approximately the fifteenth generation of the children of mixed marriages between Cossacks, convicts and the local population - Evens, Yukagirs, Chukchi and Yakuts. They view themselves as a different ethnic group from the Russians.

In the Lower Kolyma district of Yakutia the population is so intermingled that it is impossible to determine who is of what nationality or who is covered by the term 'newcomer'...

In the villages of northeastern Yakutia, the people usually divide themselves not according to nationality, but territorially; Evens, Yukagirs, Chukchi, the Russian starozhily and local Yakuts fall into one group, while recently arrived Russians (Ukrainians, Tartars, Armenians, etc.) and Yakuts from within the central regions of the republic fall into another. Mixed marriages are common within the first group, which will create an even more complicated situation with regard to nationality in subsequent generations. [Vakhtin 1993, p. 23, footnote 8.]

Separated by thousands of kilometers from the center of the country with no roads, the Arctic territories had no internal authority or prospects for fast industrial development. However, by the end of the 1920s, discovery of huge deposits of minerals and fish led to development of transportation infrastructure via water, air, and land. In the 1930s, the Northern Sea Route became the shortest passage for regular cargo delivery in the Arctic region. Fulfillment of the economic program of the NSR Administration resulted in significant changes in the population of the northern Yakutia *ulus*, with a sizable influx of newcomers of many nationalities arriving for contract based work.

Forced movement of people of different nations further expanded the incursion of non-indigenous people. In the 1930s, the government transferred vast areas of the Russian Arctic to the USSR People's Commissar of Inner Affairs (NKVD) which built and operated the Dalstroy system of concentration camps and prisons. People of many nationalities were sent to the camps and prisons from all nations of the former Soviet Union during this period of repression.

Further changes in the national composition came during and after World War II, with forced deportation of whole nations to different regions of the USSR including the Yakut ASSR. As a result of NKVD actions, special settlements were created composed of Finns (who had been in German lands) [Finny-ingermanlandtsy], Germans, Lithuanians, Latvians, Estonians, and others who were engaged mainly in fishing. The population of these involuntary migrants had declined by 1959 in connection with a movement in the 1950s to return exiles from the special contingents - to review their accusations, cancel restrictions on their movement, release them from permanent settlement, and repatriate deported and interned people.

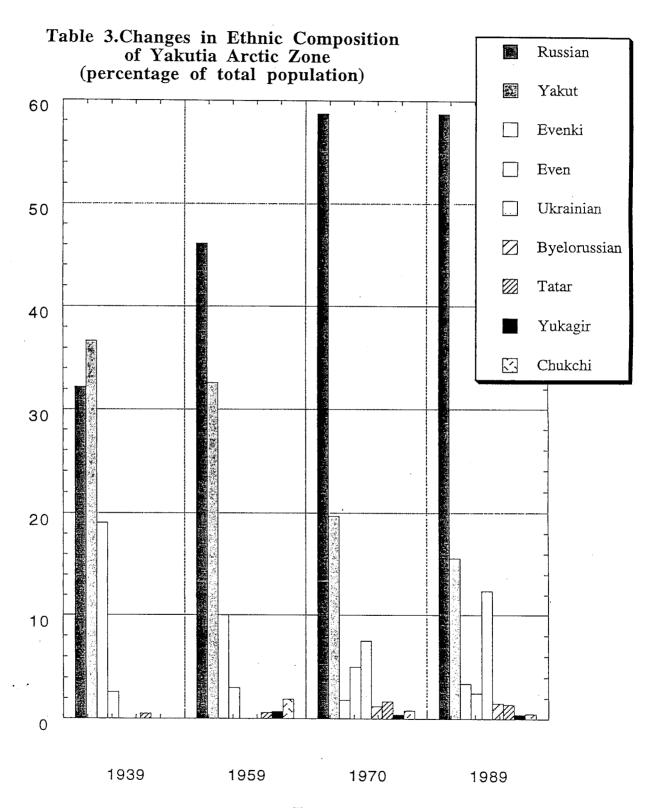
During the next three decades, the northern territories were always among those *ulus* of the Republic with steady growth. Outsiders arrived to work in the newly developing industries, as Natives were few in number and not professionally trained for industrial jobs. This process of inmigration into the Arctic zone of Yakutia continued until the 1990s. With this influx of new ethnic groups, urban areas grew rapidly in contrast to rural regions.

The Native population of the region continually dropped in proportion to other ethnic groups from the censuses of 1939 to 1989 (see Table 3). The Yakut dropped from 36.7% to 12.5%; Evenki from 19.1% to 3.0%, Chukchi from 1.9% to .5%, and Yukagir from 0.7% to 0.5%. The numerical growth of the Even between 1979 and 1989 might be explained by two factors regarding census data. First, census gatherers frequently mixed up Even and Evenki (due in part due to the fact that an Even woman in Russian would be called "Evenka"). Second, self-identification as a member of one of the Native northern minority groups increased after 1979 as ethnic self-awareness increased.³ At the same time, the Yakut (Sakha), representatives of the

³ Note that the Russian term used in many laws to designate the indigenous peoples whose numbers are small, *malochislenny narody*, literally "small numbered peoples" is translated here as "minorities" or "indigenous minorities." For the Republic of Sakha, the term includes

largest Turkic-language speaking people of Siberia, were more numerous than the other Native peoples of Yakutia. The next most numerous groups are the Even and Evenki. The smallest indigenous peoples of the Sakha Republic are the Chukchi and Yukagir, the latter being descendants of the most ancient inhabitants of the Arctic territory of Yakutia. Chukchi concentrate in areas next to the Chukchi Autonomous Okrug and spill over the political boundary. Recently, a small population of Dolgan has moved into the Republic. (Some ethnographers consider them to be a separate *ethnos*, others, a subgroup of Yakut.) In 1989, the 408 Dolgan in Yakutia were scattered over the territory, including the Arctic zone.

the following nationalities: Evenki, Even, Yukagir, Chukchi, and Dolgan, but not the dominant indigenous group – Sakha (Yakut) – from which the Republic takes its name.



Percentage of Total Population

Time

In a single generation, the percentage of all indigenous peoples in the Arctic population of Yakutia dropped markedly, from 58.4% to 19.4% (see Table 4), with total numerical growth of only 9,900 people.

Table 4. Changes in Size of Native Population

Date of Census	Number in thousands	Growth in thousands	Percentage of total population
January 17, 1939	6.4		58.4
January 15, 1959	8.4	2.0	46.2
January 15, 1970	12.5	4.1	27.7
January 17, 1979	13.5	1.0	22.3
January 12, 1989	16.3	2.8	19.4

The picture becomes clearer when analyzing the dynamics of demographic change by administrative-territorial unit. The most dramatic decline in the proportion of indigenous people to newcomers has taken place in the Bulunskii *ulus*, the territory including the mouth of the Lena River as it runs to the Arctic Ocean. There the proportion of indigenous to non-indigenous peoples dropped from 69.7% in 1939 to 27.9% in a 50 year period (See Table 5.)

Table 5. Percentage of Indigenous Peoples in each of the Arctic *Ulus*

,	1939	1959	1970	1979	1989
Allaikhovski	i 53.1	59.1	45.7	37.3	42.7
Anabarskii	63.7	90.1	86.7	79.9	49.1
Bulunskii	69.7	44.9	31.7	26.6	27.9
Nizhnekol.	32.0	27.6	14.6	15.8	17.3
Ust-Yanskii	-		22.5	14.7	11.0

Less dramatic, but no less important declines in relative proportions occurred in the other Arctic ulus despite small gains in absolute numbers of indigenous people: in Allaikhovskii from 53.1% to 42.7% (with growth of 1,400 Native people); in Anabarskii from 63.7% to 49.1% (increase of 800); in Bulunskii from 69.7% to 27.9% (with growth of 1,300); Nizhnekolymskii from 32.0% to 17.3% (with growth of 1,700); Ust-Yanskii from 22.5% to 11.0% (increase of 1,300). As is evident from Table 5, natural reproduction can account for the growth in Native populations. As in the past, growth in absolute numbers of indigenous peoples remains quite low today.

The non-Native population of the region is predominantly Slavonic, represented mainly by eastern Slavonic nationalities -- Russian, Ukrainian, and Byelorussian. Russians are by far the largest group and compose the ethnic majority in Sakha's Arctic zone. During the 50 year period under review, their proportion in the Arctic population of Yakutia increased from 32.2% to 56.0% (See Table 3.) The next most numerous ethnic group is Ukrainian, with a proportion that more than doubled in less than 20 years, from 7.5% in 1970 to 16.1% by 1989. The Byelorussian population in the region grew the most slowly in both absolute and relative terms from 1.2% to 1.7% between 1970 and 1989.

Although the Tatar are far fewer in number than Slavonic peoples, their proportion has also increased, from 0.5% in 1939 to 1.3% in 1989. The category of "other" in Table 3 comprises various ethnic groups including nearly all representatives of the former USSR and many foreign countries registered by the All-Union population census. Between 1939 and 1970, the proportion of this catch-all category declined from 8.9% to 3.2% in the total population composition in the Arctic zone. But the proportion of these outsiders then increased from 3.2% in 1970 to 5.4% in 1989.

From the beginning of the intensive development of transport and industry in the Arctic, the overall population of the region increased by 63.0 thousand people, or 14.8 times. As shown in table 6, the most dramatic increases occurred in the 1960s and the 1980s. The greatest proportionate increase of immigrant populations occurred in Bulunskii *ulus*, containing the Lena Delta and port of Tiksi (from 30.3% to 72.1%, an increase of 11,100 people). Allaikhovskii region non-Natives increased from 46.9% to 57.3% of the population with the addition of 2,200 people; Anabarskii (transected by the Indigirka River) from 36.3% to 50.9% (1,300 people);

Nizhnekolymskii from 67.9% to 82.7% (an increase of 10,000 people), and Ust-Yanskii (through which runs the Yana River) from 77.7% to 89.0% (26,200 people). The sharp rise in the population of "foreigners" (those who immigrated from outside Yakutia) in Nizhnekolymskii ulus is closely connected with industrial and transport development in the territory as well as increased industrial fishing of valuable fish stocks.

Table 6. Changes in Size of Immigrant Population

Date of Census	Number in thousands	Growth in thousands	Percentage of total population
January 17, 1939	4.5		41.6
January 15, 1959	9.7	5.2	53.8
January 15, 1970	32.7	22.9	72.3
January 17, 1979	47.0	14.3	77.7
January 12, 1989	67.5	20.5	80.6

As Table 7 illustrates, the population of "foreigners" is quite unevenly distributed. The *ulus* with a high concentration of foreigners and the largest growth in absolute population number are those with developed industries based on mineral and fishery resources as well as those with an established transport system — Bulunskii, Nizhnekolymskii, and Ust-Yanskii. The Allaikhovskii and Anabarskii *ulus*, traditionally oriented toward agricultural activities, have the lowest population of outsiders as well as a small absolute growth rate.

Table 7. Changes in Territorial Distribution of Immigrant Population (percentage of total immigrant population)

	1939	1959	1970	1979	1989
Allaikhovskii	17.3	9.9	6.4	6.9	4.6
Anabarskii	14.2	1.4	0.8	1.0	3.0
Bulunskii	34.7	57.4	26.3	23.7	18.8
Nizhnekolymskii	33.8	31.3	29.9	21.8	17.1
Ust-Yanskii			36.6	46.6	56.6

Thus, the dynamics of population within the Arctic zone vary with the level and rate of economic development. Until 1959, the population of the Arctic zone had been growing by natural reproduction, but during the last thirty years, growth is attributable primarily to migration into the region. The highest growth has occurred in Ust-Yanskii where a new mining industry has brought an influx of newcomers to mine the gold and tin, unique by the size of the deposits, strategic importance, and rapid economic return. At the same time, significant increases in population of the Bulunskii and Nizhnekolymskii ulus has been influenced mainly by further development of the NSR and related industrial activities. The lowest population growth has occurred in the rural ulus -- Allaikhovskii and Anabarskii.

Large scale migration to the polar regions of Yakutia which began in the 1930s, during the creation of the NSR and a period of industrial expansion, lasted until the 1990s. At the time of the break up of the USSR and formation of the Commonwealth of Independent States, the "newcomer" population began to decline. From 1989 to 1994, the total Arctic population decreased by nearly 30% from 83,900 to 58,900. The central Arctic *ulus* of Sakha, Ust-Yanskii, alone lost 20% of its total population, accounting for 65.6% of the total decline. Bulunskii *ulus* accounted for 17.6% of the decrease, and Nizhnekolymskii for 13.2%. The economic crisis precipitated by deep production cuts, mainly in the mining industry of Yakutia, exacerbated the dramatic outflow.

The period of intensive industrial development of the Northern territories was accompanied by a high rate of urbanization, marking the beginning of great changes in the relationship of urban to rural population. (See Table 8.) Population growth occurred in concentrated areas surrounding industrial sites. The strategy of development for the Yakut Arctic zone aimed to maximize savings in labor, capital, and material resources by creating a cheap industrial and social infrastructure through concentration of populations in urban centers. According to data for January 12, 1989, the total urban population in the Arctic zone was 63,900 people, 8.7% of the urban population of the entire Republic. This was 10.4 times the population recorded in 1959. The urban population was concentrated in worker settlements: primarily in the Ust-Yanskii *ulus* which had 56.2% of the urban population, followed by Bulunskii *ulus* with 19.7%, Nizhnekolymski with 17.9%, and Allaikhovskii with 6.2%. As the influx of urban

workers grew, Natives of Yakutia became increasingly marginalized. In 1989, the indigenous population composed only 6.1% of the urban population of the Arctic *ulus*: 33.6% of the urban population in Allaikhovskii, 8.0% in Bulunskii, 7.0% in Nizhnekolymskii, and only 2.1% in Ust-Yanskii.

Table 8. Dynamics of Urban and Rural Population (percentage urban and rural)

	1939		19	959	1989	
	urban	rural	urban	rural	urban	rural
Arctic Zone Total	6.4	93.6	33.8	66.2	76.1	23.9
Allaikhovskii Anabarskii Bulunskii Nizhnekolymskii Ust-Yanskii	13.4	100.0 100.0 86.6 100.0	60.3 	100.0 100.0 39.7 100.0	73.0 71.4 81.8 83.6	27.0 100.0 28.6 18.2 26.4

The total rural population of the Arctic zone in 1989 was 20,000 (5.5% of the rural population of the Republic of Sakha). Relatively slow growth in rural population (1.6 times the rural population in 1959) contrasted sharply with dramatic growth in urban population, showing a marked decrease in relative size. Ust-Yanskii contained the largest part (35.1%) of the rural (as well as urban) population of Arctic Yakutia, followed by Bulunskii(25.2%), Anabarskii (19.8%), Nizhnekolymskii (12.7%), and Allaikhovskii (7.2%). Of the residents of rural settlements, 62.0% were Natives of Yakutia, with this indigenous population primarily engaged in traditional economies -- reindeer herding, fishing, hunting, etc.

One notable characteristic of the demography of the northern region is the gender imbalance, with males more numerous than females (see Table 9). The disproportion is especially obvious in urban centers in contrast to rural areas, and most pronounced in Ust Yanskii ulus, with 1,000 males per 835 females in urban settlements and a ratio of 1,000 to 857 in rural areas. Mineral development and other branches of material production created a high demand for male labor. Development policies did not promote employment of women, and thus reduced the flow of women into industrially developing territories.

Table 9. Distribution of Population by Gender (percentages, 1989 All-Union Census)

	TOTAL POPULATION		UF	URBAN		RURAL	
	male	female	male	female	male	female	
Arctic Zone Total	52.8	47.2	53.0	47.0	52.4	47.6	
Allaikhovskii Anabarskii	50.5 51.2	49.5 48.8	50.1	49.9 	51.5 51.2	48.5 48.8	
Bulunskii	51.5	48.5	51.4	48.6	51.9	48.1	
Nizhnekol Ust-Yanskii	51.0 54.4	49.0 45.6	50.8 54.5	49.2 45.5	52.0 53.9	48.0 46.1	
				•			

Changes in the demographic structure of the northern ulus were closely associated with the policy of industrial development in the region, at least in part made possible by the opening of the Northern Sea Route. These changes directly affected the dynamic of the indigenous population, continuously increasing or decreasing their number, and indirectly influenced the natural movement of both Natives and migrants. The demographic characteristics of the immigrants to Arctic Yakutia affected population dynamics; in particular, the predominance of working age adults and a comparatively small number of senior population groups, a higher proportion of married people as well as higher birth rates and lower mortality rates than among the indigenous population. The newcomer population was characterized by a dominance of the nuclear family -- a married couple with or without children. Only a small part of the newcomer population included parents or other relatives. The trend among migrants toward small families with few children was influenced by their location in urban settlements, high mobility, higher employment of women in service industries, unstable marriages, and birth control in families. On the whole, the demographic characteristics of the newcomers to the Arctic zone of Yakutia resembled those of the populations who developed Russia's European North, Murmansk, and other Northern regions such as Tyumen and Kamchatka.

Growth in the Native population of Arctic Yakutia was due to natural causes, since emigration of Natives from the region always exceeded immigration. Until the 1960s, reproduction followed the traditional pattern of northern families: having many children,

relatively stable marriage patterns, and little use of medical contraception or pregnancy interruption, especially in rural areas. A drop in the birth rate which began in the 1980s has been associated with the transition to a European type of reproduction, influenced by global factors of industrialization and urbanization. This has produced a decrease in middle-sized families, whereas families with few children increased.

The newcomer population has also influenced the Native population through intermarriage. During the Soviet period, the number of mixed marriages (Natives and newcomers) increased, although endogamous marriages were still more frequent. However, the assimilation influence has been moderated by the fact that many marriages between a northern woman and a newcomer of another nationality do not last long. Many such migrants do not adapt well, and return to their homes in the south after completion of work in the north. As mixed marriages were more typical for indigenous women than men, there has been an increase in separation.⁴

A comparison of the demographic profiles of newcomers and Natives shows that the indigenous population is in a much worse situation. The low natural growth rate among Natives is compounded by a high proportion of single, unmarried people. In addition, the mortality rate of indigenous peoples has been higher than that of other peoples in the region. This could be explained in part by the age structure, which contains a high number of aging people.

In conclusion, the transition to low fertility rates, which began recently, coupled with conditions of short life spans and fast generation change among Natives in the region constitute the main reasons for their depopulation. Considering the small number of indigenous people and a trend toward the increase of some diseases, we may assume that in the near future even simple maintenance of population numbers will be difficult for the indigenous peoples of the region. This poses a significant threat to the small-numbered indigenous minorities of the Sakha Republic.

⁴ [Dr. Balzer who reviewed this paper noted, however, that in the 1990s, inter-ethnic marriages have decreased.—Ed.]

3. Traditional Economic Systems

Reindeer Herding

The economic system of the Arctic indigenous peoples is based on a combination and expansion of the typical northern economic activities - reindeer breeding, fishing and hunting. Unlike the indigenous peoples of Alaska and the Canadian North, whose traditional pursuits are the main source of self-provision, in the Sakha Republic (Yakutia) as in all of Russia, these activities are directly included in the larger system of economic relations and regarded as branches of industry.

In the Arctic economy reindeer breeding predominates. During the pre-Soviet period, it mainly satisfied the domestic needs of the herder families for food, clothing and transport. The seasonal movements of the reindeer herds within a specific area depended on the availability and quality of pasture. Environmental conditions determined the nomadic way of life characteristic of the reindeer breeding peoples. According to the 1927 census of the territory of the modern day Yakutia, there were about 114,000 reindeer, including 12,600 in the Bulunskii region, 9,700 in Nizhnekolymskii, 27,600 in Khatango-Anabarskii, and 5,900 in Ust-Yanskii.

The Soviet collectivization processes for northern reindeer-breeding farms caused a prolonged crisis for this branch of the economy. The indigenous population did not want to give their private reindeer to the collective farms, and instead drove them to lands in the Far East or began killing them for meat. There were also armed protests against collectivization. In 1931 the total number of reindeer in the northern Yakutia regions had already decreased by 20%, and according to some data, by 50%.

This disastrous decrease in the number of reindeer caused the Soviet government to temporarily slow the rate of collectivization in the North. The Yakut Oblast Committee of the Union Communist Party (Bolsheviks) issued a decree on January 31, 1935 stating that reindeer breeders had the right to private ownership of 150-200 female reindeer, 50-100 draught reindeer, and an unlimited number of young animals. In the collectives and regional centers, they provided veterinary services. These and other actions in the early 1940s contributed to some recovery of domestic reindeer populations. During this same period, the government again

attempted to collectivize reindeer breeding farms and transfer the nomads to a settled way of life. This time the repressions intimidated and weakened the local population; they did not resist. By December of 1940 more than 90% of the reindeer breeding groups joined collectives; their private reindeer, sled dogs, and trade stock became collective property. In the following years reindeer breeding developed rather successfully. In the 1950s the Yakut ASSR moved into second place after the Magadan region in rate of increase of reindeer. Reindeer breeding proved profitable. In a number of the collectives in the Nizhnekolymskii region, profits in 1950 from reindeer breeding amounted to 68.2% of total profits. At the beginning of the 1960s, 64 groupowned collectives (kolkhozy) in the Yakutia reindeer breeding regions were consolidated into 19 state owned collectives (sovkhozy), further removing control from the herding families.⁵

In the 1970s, reindeer growth rates decreased sharply. According to ecologists, pasture land capacity reached its limit at that time, and the quality of pasture declined due to intensive development of mining deposits in the Arctic zone. During the 1980s under the influence of technogenic factors on pastures of the Anabarskii, Allaikhovskii and Ust-Yanskii *ulus*, the reindeer moss reserves declined every year by 2.5% (Kurilyuk, 1982). The loss of areas where reindeer moss grows led to overgrazing of remaining tundra pastures and disturbance of the balance of the ecosystem between reindeer and fodder.

At present, the prospects of reindeer breeding development are connected to the breaking up of the collectives (sovkhozy) into smaller units and the creation in their place of clan communities (rodovyi obshiny) and other forms of extended family cooperatives. Today two-thirds of the reindeer in the five Arctic ulus of Yakutia are already in the hands of the clan communities. Thus, the indigenous peoples are returning to their traditional economic forms and nomadic way of life.⁶

⁵ [This consolidation of collectives and reorganization into state farms occurred throughout the Soviet Union at this time. Significantly, members of the collectives became "workers" for the state farms, and the state claimed ownership of reindeer and land. The paper's reviewer, Dr. M.M. Balzer notes that although the directors of collectives complained that this took away worker motivation, many herders preferred the security. –Ed.]

⁶[The actual story with regard to *rodovyi obshin* is much more complex as the new laws accept clan communities but give them no financial support and even tax them and make them pay for local roads. Balzer, reviewer's comments. –Ed.]

Table 10. Number of Reindeer (thousands of head)

	1927	1935	1946	1966	1981	1994
Sakha Rep. Total	113.9	43.9	170.4	359.3	380.0	324.9
Arctic Zone Total		21.3		141.3	160.2	142.6
Allaikhovskii Anabarskii Bulunskii Nizhnekol. Ust-Yanskii	27.6 12.6 9.3 5.9	1.4 3.1 7.8 6.5 2.3	13.2 29.4 14.3	23.7 23.9 43.3 35.7 14.7	22.0 26.2 40.7 36.4 34.9	21.9 20.8 25.2 53.1 21.6

Table 11. Number of Nomadic Farms

	1986		1.	991	1992	
	farms	people	farms	people	farms	people
Sakha Rep. Total	121	291	153	284	114	222
Arctic Zone Total	63	156	60	156	63	136
% of Sakha Nomadic Far Located in Arctic Zone	rms 52.1	53.6	39.2	54.6	55.5	61.3
Allaikhovskii Anabarskii Bulunskii Nizhnekol Ust-Yanskii	19 27 17	20 106 30 	 48 3 9	 141 3 12	34 20 9	 86 38 12

Fishing

Similar processes took place in the fishing industry, another traditional branch of the northern economy. Yakutia's big rivers - the Lena, Yana, Indigirka, Kolyma, Alazeya, and Omaloy - which flow into the Laptev and East-Siberian Seas, contain the main fish stocks. Five of the Republic of Sakha's Arctic districts are located on their lower reaches, which contain 70% of the total fish reserves of the Republic, including such valuable catches as *nel'ma* (white salmon), *osyotr* (sturgeon), *omul* (salmon family), *muksun*, *riapushka*.

Before the October Revolution fishing was a subsistence activity. Seventy percent of the Arctic's Native population engaged in fishing (although for reindeer breeders this was supplementary to herding and considered a lesser way of survival). During the Soviet period, the fisheries in Yakutia were transformed into a separate branch of the economy. In order to aid its development, the joint-stock company "Lenryba" was created and then reorganized into the trust "Tus-balyk".

During World War II a sudden increase in catch efforts transformed the trade into an industrial activity. Due to the loss of important fishing centers in the Sea of Azov and the Black Sea, Soviet authorities created a new fisheries base in the East of the USSR. In 1942 interned Finns and repressed Lithuanians were brought to work in the fishery, along with thousands of Yakut (Sakha) who were forcibly resettled from Central Yakutia. A fish-processing industry with several fish factories was formed at the northern mouth of the Lena, which yielded a record catch. Then the size of the state's catch decreased. In the Arctic *ulus*, the fishery harvested only about seventy percent of the previous yield. The indigenous population purchased 30-80% of the fish from the factories.

In the last ten years, as a result of mining activity and sea and river navigation, some of the rivers have fully or partly lost their importance in the fishing industry, placing the lives and means of sustenance of Native peoples in jeopardy. Fish spawning habitat in Yakutia is in a strained state, in particular for *muksun*, white salmon and sturgeon. In the Omaloy and Khroma rivers fish habitat is reduced to a critical state, and experts consider their restoration already impossible.

The depletion of fish stocks has further impacted the Native economy as it has led to a decrease of fur-farming (raising of fur animals in cages) and hunting; the farmed silver foxes and sled-dogs used in hunting were fed exclusively on fish. For example, reduced fish stocks in the Kolyma caused by the Zelyonyi Cape seaport and Magadan gold mining enterprises led to the closing of some fur farms and a general reduction of fur-farming in the region. The future of commercial and subsistence fishing depends on ecological factors and particularly on the effectiveness of environmental protection measures to prevent the negative after-effects of Arctic industrial development.

Table 12. Fish Catch (tons)

,	1981	1985	1990	1991	
Sakha Rep. Total	7029	9469	8252	6887	
Total catch of Arctic Ulusy	3471	4707	4841	4779	
Allaikhovskii Anabarskii Bulunskii Nizhnekol Ust-Yanskii	673 34 1524 1195 45	877 47 983 2425 375	1258 29 1489 1739 326	2274 19 1394 862 230	

Table 13. Status of Fish Stock in the Arctic Zone Rivers

Conventional Signs: (-) species are absent; (o) satisfactory state; (x) over fishing; (+) under fishing

		Anabar	Omaloy	Yana	Khroma	Kolyma
Sturgeon	(Osyotr)	х		x		x
White Salmor	(Nel'ma)	x	x	x	X	x
Salmon-Trout	(Taimen')	x	х	x		**
	(Lenok)	x	X	х	x	O
Grayling	(Kharius)	x	X	x	x	О
	(Gonets)		X	x	X	+
	(Muksun)	x	x	x	x	x
	(Omul		0			x
	(Chir)	+	+	0	х	О
White Fish	(Sig)	+	+	+	O	+
	(Pelyad)	+	0	+	O	+
	(Riapushka) x	+	0	x	0
	(Tugun)	+	0	+		
Ide	(Yas')	·	0			
Burbot	(Nalim)	+	+	x	0	+
Crucian	(Karas)				+	+
Perch	(Okun)	+	+	+		+
Dace	(Elets)		+	+		+

Hunting

The hunting trade of the northern Natives was greatly altered (even from the pre-Soviet period) by pressure from the government. Hunting, crucial for food and clothing, was a complimentary activity of the traditional economy, alternating with fishing during certain seasons. The arrival of the Europeans turned the fur trade into a kind of exploitation of the Native inhabitants. The tsarist fur tax (called yasak) policy resulted in the destruction and depletion of game species. One of the Soviets' first decrees was to claim hunting grounds and faunal resources as state property. In the 1930s, the Soviet government took practical measures to consolidate the state monopoly on fur trade production. In order to increase the stock of furs (the most important source of capital for industrialization and strengthening of the USSR's military power), the government took measures to develop hunting as a commercial activity and to improve technical hunting equipment. For this reason some hunters were not drafted during World War II. After the war, the stock of fur-bearing animals had been depleted. In the hunting trade structure, the northern reindeer rose to first place in commodity output, and the production of fur fell from first to third place (Sedalishchev, 1993).

At present the Arctic fox (*Alopex lagopus*) is the main object of the Arctic fur trade. Despite the increase in the total gross indexes, in recent years the fur take in the Arctic regions has declined steadily. For example, in Anabarskii *ulus* hunters took 1,140 polar fox skins in 1985, but in 1991 only 464; correspondingly in Bulunskii 1,749 and 476; Ust-Yanskii 2,358 and 1,132; Allaikhovskii 2,293 and 1,251; and in Nizhnekolymskii 1,964 and 750. This decrease in the fur trade, along with similar trends in reindeer breeding and fishing, indicates a deep crisis in these economic branches. The erosion of the natural resource base of the economic activities of the indigenous population coupled with their smaller share of wage employment has led to many serious social consequences and intensified the region's social tensions.

Table 14. Fur Trade of Arctic Fox in Yakutia Tundra Zone (number of pelts)

	average	1935-1961 min.	max.	average	1962-1992 min.	max.
Allaikhovskii	2355	898	5017	3539	1249	6242
Anabarskii	2947	1030	5474	3590	464	6840
Bulunskii	3079	873	6257	3977	48	10450
Nizhnekol	2355	898	5017	2028	750	6242
Ust-Yanskii	3548	1063	6859	4310	594	6254

The existence of traditional economic activities depends fully on the Arctic ecosystem, which continues to be disturbed with catastrophic results. The human driven transformations of the natural environment have already reached levels which are inauspicious for Native health and threaten the natural resources which form the economy's traditional base. Fragile Arctic ecosystems react poorly to any breach of the ecological balance.

Protection of the sea zone, including the coast, shelf, and islands of the Arctic Ocean needs increased attention. The most central areas are the summer pastures of reindeer, which also house the nesting places of birds, and the river delta areas which are the fattening places of valuable fishes such as the white salmon, *muksun*, *riapushka*, and *omul*, and the habitat of the walrus and ringed seal.

Intensive movement along the Northern Sea Route and in the ports and docks for vessels has resulted in a serious ecological situation. There is intensive pollution in sea water and in delta areas in Nizhneyansk, the Bay of Tiksi, the Neelov Gulf, and the port of Yuruyng-Khaya. The coastline and islands are littered with metal fuel barrels, and the water near the coast is polluted with oil products. The after effects of nuclear tests on the island of Novaya Zemlya have yet to be studied. Environmental problems could significantly increase if the use of the Northern Sea Route expands. Measures for environmental protection and preservation of the Arctic peoples' resource-based economic activities are a necessity.

Brief analysis of traditional northern economic branches – reindeer breeding, fisheries, and hunting – shows that they are an economic basis for the survival and revival of the native

peoples. These economic activities could be preserved and developed only with rational reproduction of the ecological environment, with wise use of achievements of progress in science and technology, uninterrupted revival of traditional skills and the mode of life of the indigenous inhabitants.

In the transitional conditions to market conditions, sudden changes of form and methods are occurring. Clan communities (*rodovyi obshiny*), which were based on *sovkhozy* (state owned collectives) and *promkhozy* (industrial collectives), are at a formative stage and are experiencing difficulties. A complex of actions is necessary to revive and support traditional economic systems and to provide employment to native peoples including the following: creation of indigenous industries, long-term credit at reasonable interest rates, special programs for guaranteeing employment of the population.⁷

4. Public Health, Education, and Public Services

The social infrastructure of the Sakha Republic consists of education, public health, culture, commercial and public food provision, and communal housing. Preschools and schools for general education constitute the system of national education; regional and district hospitals, and surgical-obstetrical stations - public health; clubs, public libraries and cinemas - culture; stores for groceries and other household supplies, and other commercial ventures - trade; restaurants, cafés, canteens - public catering; tailor shops, hair-dressing salons, bath-houses, wash-houses, dry cleaners, hotels, etc. - consumer services.

⁷[Dr. Balzer makes several concrete suggestions regarding the specific uses for and benefits that might be gained from well placed loans and credits. She wrote in her review of the paper, "From my field interviews, I would support a new fur trade pattern whereby in the villages themselves, community fur processing (possibly by under-employed women) goes further than the minimal [processing] done now." She points out that with small additions of capital and equipment, the fur trade could be much more lucrative for locals especially with a reduction in the excessive number of middlemen. "Study of how to put reindeer breeding and silver fox 'fur farms' on better commercial footing could also help. In addition, enhancement of the Northern Sea Route could result in export of some of the farthest north dairy products that exist in the world if only minimal equipment for cheese making, for example, were in northern villages. (Cattle are as near to the five *ulusy* featured here as Srednaya Kolyma). Transport north, not south, could improve timing, thus marketability. The same reasoning works for fish and fish processing. But local leaders complain that they don't have the money or credits to buy even simple fur, dairy, or fish processing equipment and local transport for their new village cooperatives." Balzer, Reviewer's Report, (1995), p. 4. –Ed.]

The majority of these establishments were built during the Soviet period as a result of the "cultural revolution", part of the Soviet national policy which manifested itself in the cultural "development" of "formerly backward northern nationalities" through the organization of a wide network of social and cultural institutions. Originally they were mobile in nature (nomadic schools, "red tents" etc.), but by the end of the 1930s, after the transfer of nomads to a settled way of life they formed a stationary network of health care, education, trade and consumer service institutions.

The development of transportation along the NSR, navigation on the rivers of the Arctic Ocean basin, and industrial development of tin and gold bearing deposits in the polar regions all promoted the further extension of the Sakha Republic's social infrastructure in the Arctic zone. The status of a working or urban community which sprang up in an industrial transport center presupposed a certain level of social improvement and material services. However, as in all regions of intensive industrial development in Siberia, the objects of the social infrastructure did not receive proper support.

The Soviets' achievements in aboriginal settlements during their first few years of power included the control of many wide-spread diseases and, by the 1950s (for the younger generations) almost universal literacy due to the institution of boarding schools. However, after the intensive development of transport and industry in the northern territories, the state of social institutions became noticeably worse. The transfer of regional centers from historic locations to new industrial centers and ports caused the slender resources for culture, education, health care, and other public services provided by the Soviet and republican powers to be redistributed to favor the new centers. Today the Arctic population of Sakha (Yakutia) has a low level of medical services, child care, cultural and educational institutions.

Table 15. Supply of Preschools (Data as of early 1989)

	Preschools	Children	Spaces	Children per Space
Allaikhovskii	. 9	498	320	1.56
nabarskii	4	356	268	1.33
Bulunskii	8	638	666	.96
Nizhnekol	4	270	228	1.18
Jst-Yanskii	7	409	355	1.15

Table 16. Network of Medical Establishments (Jan. 1, 1991)

	Hospitals	Health Centers and Clinics	Medical Assistance Obstetric Centers
Sakha Rep. Total	303	402	308
Allaikhovskii Anabarskii Bulunskii Nizhnekol Ust-Yanskii	3 4 7 4 9	4 4 9 5 12	4 1 4 4 7

Source: Compiled by Pika and Bogoyavlenski from Sotsial'no-ekonomicheskoe..1991).

Table 17. Availability of Health Care in 1989 (per 10,000 inhabitants)

	Doctors of All Specialties	Medium-level Medical Personnel	Hospital Beds	
Allaikhovskii	39.6	131.2	156.2	
Anabarskii	33.3	121.2	151.5	
Bulunskii	16.0	84.0	180.0	
Nizhnekol	9.1	63.6	113.6	
Ust-Yanskii	12.5	65.0	187.5	

Table 18. Education (Data as of early 1989)

,	Number of Schools	Number of Students	Number of Teachers
Sakha Rep. Total	687	206,995	17,121
Allaikhovskii	7	1,146	145
Anabarskii	4	843	81
Bulunskii	13	3,365	276
Nizhnekol	7	2,460	185
Ust-Yanskii	17	8,099	535

Table 19. Supply of Cultural and Educational Resources (Data as of the end of 1988)

	Clubs	Club Capacity	Libraries	Cinema Units	Seating Capacity
Allaikhovskii	6	400	7	5	500
Anabarskii	4	250	3	3	330
Bulunskii	13	870	7	7	750
Nizhnekol	6	420	4	4	414
Ust-Yanskii	9	700	5	6	650

Table 20. Government Trade Establishments [1988]

	Number of Trade Enterprises	Trade space in Sq. Meters	Sq. Meters per person
Allaikhovskii	23	1373	2.92
Anabarskii	19	573	1.91
Bulunskii	11	734	1.53
Nizhnekol	9	427	1.94
Ust-Yanskii	9	429	1.13

Funds for national education, health care, and cultural institutions do not all meet modern requirements, and their renovation and reconstruction require considerable capital investment. This is especially typical in the remote, low population areas of the Arctic zone, where adapted buildings rather than standard ones house the majority of kindergartens, schools, hospitals and

clubs. Most of them are in poor condition. They lack central heating, water supplies and sewage systems, and ventilation is achieved through air ducts.

The level of public services in the Arctic region of Yakutia is especially important due to its severe climate and extreme working and living conditions. Need for public services is higher here than in regions with temperate climates.

Table 21. Housing Availability in 1989 (living space in thousands of sq. meters)

	Total	. In Rural Areas	
Allaikhovskii	56.1	13.0	
Anabarskii	21.9	21.9	
Bulunskii	42.7	34.7	
Nizhnekol	14.2	14.2	
Ust-Yanskii	25.2	15.2	

For many years the Sakha Republic's housing supply was rated 71st of 73 "subjects" (areas) in the Russian Federation and last in the Far East economic region. Table 22 shows the average figures describing the relative availability of housing. But more thorough analysis reveals a rather joyless picture. According to statistical data, the provision of the Yakutia Arctic zone population with housing was essentially lower than in the rest of the Republic. For example, in 1989 in the Anabarskii *ulus* each inhabitant had 6.6 square meters; in an urban area in the Alaykhovskii *ulus* 11.8 sq. m. and in a rural area 9.8 sq. m; in Bulunskii *ulus* respectively 13.3 sq. m. and 7.9 sq. m.; in Nizhnekolymskii *ulus* 6.5 sq. m.; in Ust-Yanskii 12.2 sq. m. and 6.3 sq. m.

The quality of public utilities is still very low. As statistics show, the housing fund for supplying the Republic's northern *ulus* with water, sewage systems, hot-water, gas, and floor tiles is small, and in some administrative-territorial units (including almost all rural localities), these are completely lacking. Provision of central heating is also low. All of this makes it necessary for local residents to expend significant time and energy to procure a large quantity of solid fuel (wood and coal), water and ice.

The development of the social infrastructure of the Sakha Arctic zone has become noticeably detached from the economic development of the region and does not provide for the needs of its population. As a result certain problems have arisen which call for research and solutions:

- the formation of a base for the building industry
- the development of health care, national education and cultural services directed towards overcoming the existing disproportion between small settlements and larger cities
- arrangements for high quality working and living conditions, mainly in rural areas.

5. Social and Cultural Systems

The terms "population of the North" and "population of the Arctic," have been used in scientific writings and the press with several quite different meanings to refer to (1) all inhabitants of the North, (2) constant or permanent residents of the North, and (3) peoples whose ethnic development is inseparable from the Arctic. Today, the inhabitants of the Arctic zone of the Republic of Sakha include various "ethnoses". the Yakut, Russians, the northern minorities, Slavonic, and other non-indigenous groups. This paper focuses primarily on the NSR's influence on the cultural complexes of those ethnoses whose life work is a part of the traditional economic system of the Arctic. These are the Yukagir, Chukchi, Even, Evenki, Yakut (Sakha), Dolgan, and Russian *starozhily* (old residents).

The material and spiritual culture of the Yakut (Sakha) and Evenki has been studied much more thoroughly than that of the Yukagir and Even. Some ethnic groups – the Northern Yakut, Dolgan, Yakutia Chukchi, Russian *starozhily* – have not been given equal attention in the ethnography of northern Yakutia. The large sphere of historical and ethnographic questions particularly relevant to northern Yakutia are reflected in scientific works by G.V.

⁸[There is no adequate equivalent in English for the term "ethnos" (Russian, etnos) which is widely used in the Russian literature. "Ethnos" is used to mean the cultural, ethnic, and genetic characteristics of a group perceived to be a distinct population by specialists. The term focuses on outsider perception in contrast to the term, "ethnicity" where the focus is on insider perception. See Bromlei, 1983. –Ed.]

Ksenofontov, G.M. Vasilevich, V.A. Tugolukov, A.I. Gogolev, Z.V. Gogolev, I.S. Gurvich, B.O. Dolgikh, S.I. Nikolayev, and many others.

We were asked particularly to describe cultural changes that have occurred in northern Sakha and to examine the drivers or agents of cultural change. Thus, we address here the general characteristics of Arctic civilization inherent in local social and cultural systems, the main peculiarities and obvious changes which took place inside the original cultures. Within the study area, one may observe considerable variation among cultures in the degree of cultural continuity and preservation. Defining the mechanism of preservation is very interesting. Is preservation the result of outer powers' differential influence on some cultures or is there some cultural ability to resist changes?

The indigenous population of Sakha (Yakutia) passed through all the usual processes of "sovietization" normal for peripheral nationality-based regions. Soviet rule brought collectivization, sedentarization, reorganization of production and work, and an abrupt invasion into the sphere of marriage and family relations. These combined to provoke changes in the material, ecological, social, normative, and spiritual spheres of indigenous peoples' cultures. The ability of different ethnic groups to resist changes imposed from outside differed. Much depended upon population numbers, uniformity of life-style, and ethno-psychological experience in adapting to external contacts.

The socio-cultural mosaic of different ethnic groups, uneven study of cultural complexes, and different perspectives on their preservation and development create difficulties in isolating determinants of cultural change. Questions regarding cultural continuity and viability of particular cultures are seldom examined in the ethnology and sociology of Sakha-Yakutia's indigenous peoples. There is a only a smattering of information in historical-sociological, ethnographic, and socio-economic research.

Irrespective of whether one determines that the most important elements of culture are material, spiritual, or a system of ideas and values, the influence of external social institutions

⁹[In particular, the larger research question examined in the INSROP IV. 4.1 is the influence of institutions and government policies connected with development of the NSR on indigenous cultures. –Ed.]

upon indigenous cultures is universally recognized. The influence of outside institutions on the ecology (life-style niche), schemes of inner management, value systems, property relations, marriage and family relations of indigenous peoples appear to be a world-wide issue studied by ethnologists trying to determine cultural specificities and universals.¹⁰

The greatest culture change can be linked to changes in the environment or more particularly to the changes in the ecological niche within which an indigenous culture lives. Outside influences may stimulate cultural changes through narrowing or destroying the ecological niche, for example, by redefining borders, reducing the region in which traditional lifeways may occur, or creating competing industrial centers. For hundreds of years the Arctic zone of the Sakha-Yakutia territory has been considered a natural cultural reserve, although the aboriginal peoples of the region have been in contact with Russian civilization since the first half of the 17th century. As a colonial appendage, territorial and cultural isolation characterized the land. Given that Russia itself lagged behind western European rates of social and economic development, conservation of traditional social and cultural systems was ensured.

At the same time newcomers to the region brought changes in the material culture of the indigenous peoples. Production of consumer goods, borrowing of material objects, interdependencies, and a natural cultural diffusion brought some cultural changes. Colonization broke the economic structure by introducing state involvement in the traditional economy and distribution of its production. The deformation of the ecological niche was an even greater hardship. Economic hardship was introduced when local populations were obliged, without pay, to provide transport (horses, deer, dogs). Although the only settlements were of a military and administrative character, the pre-industrial stage of Russia's development did not permit the aboriginals of Yakutia to consider their own ecological niche as their refuge and did not recognize indigenous property rights. Unlimited export of furs obtained as colonial tax payments (yasak) depleted the hunting reserves.¹¹

¹⁰ See Osherenko, 1993.

¹¹ Dyakonov, p. 34-38.

Another factor in the destruction of biological and ecological systems was disease. Given conditions of isolation from densely populated regions, the northern inhabitants had no immunity against new diseases. From the first contacts with Europeans, the epidemics began. Whole ethnic groups of indigenous people died from smallpox. The poetic memory about "yukagir fires" (the name given in the Yakut language to the northern lights) reflects impressive numbers of the Yukagir and Yukagir-speaking peoples in the North of Yakutia before the smallpox epidemics of the 17th century. Populations of the Evenki and Even were also reduced by several times their original numbers. This process is analogous to the smallpox epidemics in Canada, where in the 17th-18th centuries, isolated indigenous camps and communities had even greater losses.

Among Native "ethnoses" the Sakha people, relatively used to interacting with others, turned out to be more resistant to introduced diseases and, for a long time, constituted the ethnic majority on a vast territory. But maintaining healthy populations depended not only on the caprice of epidemics, but also on extreme poverty and ecological crises. Exhaustion of ecological habitat for extensive animal breeding may explain the reduction and actual cessation in the natural growth rate of the Yakut (Sakha) between the second half of the 19th century and the first decade of the 20th. 13

Despite differences in ethnic origins as well as material and spiritual culture, the inhabitants of the Arctic regions are united by historically conditioned bio-psychological similarity. Geographic location, climate, cycles of nature, and ethnic diet affect physiology. Physiological aspects include specific nervous system responses and distinct sensory qualities. Recent results of biomedical research have documented the vulnerability of the northern indigenous population to alcohol and drugs. The blood of Arctic aboriginals, as well as of the Yakut-Sakha (who are considered to be a more southern ethnos) does not contain a sufficient quantity of alcohol destroying anti-genes. According to Yakut physicians' data, blood analysis of Russian *starozhily* and second generation migrants are analogous. This is

¹² [It is also probable that the larger size of the Sakha population buffered the devastating effect of epidemics. –Ed.]

¹³ Ergis, 1994.

¹⁴ Turnin 1994.

important as alcohol has permanently destroyed the health and genetic fund of Arctic populations. Alcoholism developed and produced obvious negative social and moral consequences in the national villages during the Soviet period. 15

Industrialization produced an ecological catastrophe on aboriginal lands. The first symptoms appeared in the second part of the 19th century with the initiation of gold mining. This led to an increase in the population of newcomers and the corresponding phenomena of environmental destruction, including deforestation, fires, and poaching.

The ecological behavior of humans is highly dependent on moral and religious convictions. World religions present three types of interrelations between humans and nature -- humans as slaves of nature, humans as a part of nature, and humans as masters of nature. Submissiveness and aspirations to please the worshipped powers of nature are typical for archaic human communities as well as for the medieval civilizations of Egypt, Greece, Rome, and sometimes for relatively modernized European and Asian countries. Christianity and Judaism propagated the supremacy of the human, who is created in the Lord's image over nature and its manifestations. The Christian convictions of the colonists contradicted the ecological traditions of the indigenous population of Yakutia. The opposition of humans to nature was always alien to indigenous religious beliefs in which humans were perceived as a natural and organic part of Nature. These perceptions influenced corresponding attitudes toward nature as a Mother. Respecting the laws of nature, regarding forests, rivers, lakes, birds and animals as sacred, and psychologically incorporating them into categories of "humans", were part of the Northern cultures. The idea that Northern humans should obey general socio-cultural norms of nature and moral principles survived even the period of Soviet atheism.

Indigenous behavioral norms lead to the intelligent regulation of natural resource use, limiting the scale of hunting and fishing to amounts which do not exceed the current needs of the community.¹⁶ For the elder generation of Yakut, Evenki, Even, and Yukagir, until the

<sup>Argunov, 1988, p. 192; L.I. Vinokarova, 1993, p. 81.
See, for example, Morokhoeva, U.A. Vinokurova, 1995.</sup>

present time, wasteful or destructive behavior toward the gifts of forests and waters was censured. The indigenous philosophy presupposed punishment for such behavior.¹⁷

All cultural and economic activities of Arctic indigenous cultures are based on adaptation to nature on the basis of interrelations and not ecological intervention. Although purely northern branches of the economy (hunting, fishing, reindeer breeding) receive much from nature, the attitude of northern people to nature was never that of a strictly pragmatic consumer. All branches of northern indigenous economy had almost ritual forms, regardless of whether the activity entailed individual or collective action. The trades of all ethnic groups had canonized ethical codes. The population in the North incorporated different ethnoses and was rather numerous. With slender resources and poor ability to restore Arctic territory, observance of a sufficiently strict complex of regulations of consumption is required. Most important, hunting and fishing were limited by a code of norms and taboos directed to protection of the biological cycle (with seasonal and fertility balance considerations), as well as insurance of natural reserves for the future. ¹⁸ This code was often broken as outside institutions imposed planning from above, administration from distant locations, and partition of regional territories that disrupted traditional boundaries for hunting or herding territories and permissible catches of animals or fish.

The conditions of nature in the North concretely limited the number of people who could live in a particular locality. The more northern, the closer to the Arctic Pole, the lower

¹⁷Alexeev, 1993; Kurilov, 1993, etc.

^{18 [}Dr. Uliana A. Vinokurova, a specialist in sociology and psychology (particularly ethnopsychology) at the Institute of Problems of Small Numbered Peoples of the North (Yakutsk), provided several concrete illustrations of such rules and norms during a conversation with Marjorie Balzer and me in December 1995. She explained that there are certain kinds of things you teach children not to eat in order to prevent children from coming in contact with bears, because these are bears' food. There are also certain birds and animals that people are not to shoot, some of them rare. Prohibitions may be motivated by a future orientation, concern for immediate preservation, or mythological reasons. "In the case of nomadic peoples," she explained, "so much depends on resources available, speed, and awareness." In earlier times, people were aware that they had a place to move to if resources became scarce in one area. "...[Rules also vary] depending on how close you are, on how close you live to your environment. People didn't cut wood close to their homes but further away." Reminded of the cuckoo by homus music playing on an audio tape while we talked, Dr. Vinokurova explained, "The cuckoo especially was revered, and people didn't touch it." One friend of hers, a fine homus player, never imitated the cuckoo she explained, but a friend of his began to imitate the cuckoo on the homus and others did too. This became very popular, so now her friend does also. –Ed.]

the population density. Traditional camps or settlements in Central Yakutia were relatively denser than those of northern Yakut, Evenki, Even, and Yukagir on analogous territory.

During the 1930s and, with a break during World War II, from the 1950s, the Soviet authorities divided the whole territory of the Republic into regions and destroyed the traditional system of settlement. In the latter period, a massive campaign of sedentarization increased the disruption of traditional camps. Those who visited Yakutia's settlements could see the results of this policy in concentration of the population, transport, and animals and the mechanization of the economy.

Isolation from the political and administrative centers and sparse populations for a long time protected the territories of modern Allaikhovskii, Bulunskii, Nizhnekolymskii, and Ust-Yanskii *ulus* from the processes of cultural modernization. The Soviet period marked the beginning of real cultural intervention as political and economic interests in the Arctic (in large part connected with development of the NSR) intensified. Trade and monetary relations continued together with barter arrangements. At first, impacts of industrialization and transport were localized in the places most advantageous for exploitation of resources. Although the increase in population of outsiders was significant and the development intensive, on the whole, the early period of development did not destroy the way of life of indigenous peoples nor their manner of economic activity.

As the needs of the Soviet macro economy grew, gold and diamond mining and other industrial activity expanded, and construction of hydroelectric power plants began. Creation of powerful industrial centers concentrated industry and population in the Arctic territories overusing the capacity of the land. Not one of the industrial programs provided for the protection of the cultural complexes of indigenous people living in the territories where industrial building occurred. For the most part, transport and industrial projects totally ignored the presence of the indigenous population. There was no consideration of spiritual culture, language, traditions, or the institutions of indigenous peoples.

In 1991, scientists surveyed a selective sample of indigenous peoples of the Sakha Republic to determine their current status and most serious problems. The sample surveyed included 162 men and 165 women, among them Evenki constituted 51.1%; Even, 30.1%;

Chukchi, 6.8%; Dolgan, 6.5%; and Yukagir, 5.9%. In answering multiple choice questions, respondents ranked the following three problems as most important: shortage of staple foodstuffs, unemployment, and destruction of the environment around them. Among the ecological problems noted, 62% of the respondents stressed the unsatisfactory state of lakes, rivers, and coastal areas; 45% the state of the atmosphere; 66% noted that they have been ousted from the traditional spheres of work (crafts trade, animal breeding, hunting, and fishing). Only 3% considered that they had acquired more than they lost from cultural contacts with outsiders; 56% definitely declared only losses due to contact with newcomers.¹⁹

The nomadic way of life is the optimum variant for exploitation of natural resources under conditions of low capacity for revegetation. Routes of migration and location of nomad camps as well as areas of hunting and fishing were adapted to the site-specific characteristics of the land, and at the same time remained flexible, changing to correspond to concrete ecological situations and seasons. Unfortunately, this nomadic way of life was declared to be primitive and backward. Special governmental decrees forced nomads into settlements. The sociological opinion poll revealed an unspoken protest against settlement policies, and 66% of the region's Arctic inhabitants in the 1990s still consider the nomadic way of life to be a method of production that would be able to provide full employment to ethnic minorities and to preserve cultural traditions.

Formerly, the whole territory of Arctic Yakutia belonged to the ancestors of today's indigenous inhabitants. However, the state and its departments re-drew the map of ancient lands over a long period. They moved peoples away from locations of industrial development. The natural ecological and cultural reserves of the Arctic zone became prison colonies and industrial wastelands. The phenomenon of the development of Russia's northern territories has not yet been studied by anthropologists and sociologists from the viewpoint of

¹⁹ [The survey was conducted by the Institute of Language, Literature, and History in Yakutsk (now the Institute of Humanitarian Studies); the report is dated October 1991. The research team was headed by Dr. U.A. Vinokurova (at the time a member of that Institute). She reported that follow-up surveys conducted more recently substantiate the results, but the sensitivity to and need for cultural revival has become a more prominent concern in the later surveys. (U.A. Vinokurova, personal communication to Osherenko and Balzer, 10 December 1995, Norwich, Vermont.) -Ed.]

its influence on indigenous ethno-psychological health. Filling this gap would put a moral accent on individual and public perception of the place of the indigenous population in the "prison without bars."

In 1991, the places of "compact living of the northern minorities" were mapped. In the Republic of Sakha, there were only 79, and only 13 of these were recreated on places that had never been devastated. Among the whole population living in these localities (45,000), about 18,000 are members of the indigenous minorities. In these ethnic communities, there are 12 Evenki schools, 28 Even schools, 1 Yukagir, and 2 schools with mixed teaching. The death rate in the nationality-based settlements of Sakha is higher than in the towns -- 9% as compared to 5%. The mortality rate is especially high in the settlements near transport centers and industrial plants.²⁰

A review of key points regarding social and cultural systems of Arctic Sakha's indigenous peoples follows.

(1) Preservation of traditional forms of social organization varies greatly. Many of the ancient traditional forms of property organization and property relations had already disappeared during the pre-Soviet period. Revival of older forms (institutions of elders, extended family and clan communities) is problematic, but it has occurred in the wake of Soviet collapse as a kind of instinct for survival, an effort to overcome the destruction of clan-tribal organization that the Soviets paternalistically had deemed "patriarchal feudal relations." Forms of clan communities are more prevalent among the Even, Evenki and Yukagir than among the other indigenous groups. At the end of 1993, there were more than 80 clan communities in the Republic.²¹ They are more

²⁰ I.I. Vinokurov, 1994. [U.A. Vinokurova (1995) noted (at pages 44, 45): "Life expectancy among peoples of the North remain at the level of 1898-1899. Widespread alcoholism among men in these ethnic groups over the last 30 years has sharply reduced the number of men older than 30. General mortality is two to three times higher than for Russia as a whole, and violent deaths are three to four times higher than for the entire country. . . . Mortality among the adult populations of the small ethnic groups is three times higher than for other peoples in Yakutia (for children, it is 3.5 times as high), and mortality in rural areas is from 1.5 to two times as high as in cities. Infant mortality among the peoples studied is 30 to 50 times as high as in Japan or Sweden."—Ed.]

Community, here, means "a community of people holding the same national values, living in one settlement or group of settlements and making their living in a similar way." U.I. Vinokurova, 1995, p. 45. Establishment of clan communities was authorized on 23

recognized, official, organized versions of links that had survived from an earlier period, so they are both old and new at once. Among the Yakut, family or closely related communities are more typical. These are sometimes indiscernible from a new form of organization as family homesteads. All of these forms of social and economic organization are experiencing financial difficulties, and many communities are on the verge of disbanding. [As of December 1995, 194 clan communities had been formed. Contraction and expansion of new economic forms is likely as formation is a process of trial and error. Thus, the number of clan communities may go down again as reconsolidation occurs.²² - Ed.]

The tribal conferences of women (Women's Councils at workplaces and places of residence) and elders' councils (or "Comrades' Courts" at workplaces and residences) which hear civil cases were more durable. Typically, Councils of Elders created in the last two years [1994-1995] among many ethnic collectives function as ethnic leaders and also as informal boards of arbitration, peoples' courts. Thus, the Yukagir and the Even Council of Elders have almost traditional functions.²³

(2) The loss of the usual forms of traditional livelihood and the low place in the social hierarchy of Arctic indigenous peoples combine to provoke dysfunctional behavior among indigenous minorities. The process of "lumpenization" [being forced into lower class masses] of the indigenous population was accelerated by the numbers of indigenous people employed in social production (according to 1989 statistics) and exacerbated by invasion of market relations in the more unprepared territories of the Yakut Arctic.

December 1992, by an Act of the Republic of Sakha (Yakutia) on nomadic tribal communities of indigenous minorities, and a new law on the subject was pending in the Sakha Parliament (*Il Tumen*) in the fall of 1995.

²² [U.A. Vinokurova and M.M. Balzer, personal communication to Osherenko, 10 December 1995, Vermont. –Ed.]

²³ [A draft law of the Sakha Republic on the Structure of the Yukagir People (*Il Tumen proekt*, summer 1995) provides for these councils, but this law had not been adopted as of April 1996. –Ed.]

(3) Language continuity is a key indicator of cultural continuity. According to data of the 1989 census, knowledge of language in the 5 Arctic *ulus* is as follows: 9,607 of 10,405 Yakut (92.3%) considered the Yakut (Sakha) language as their native tongue; 276 of 403 Chukchi (68.4%); 168 of 374 Yukagir (44.9%); 778 of 2,484 Even (31.3%), and 23 of 2,538 Evenki (0.9%). These figures are quite similar to the statistics for all northern regions of Sakha-Yakutia: 8.5% of the Evenki; 34.7% of the Even, and 35.2% of the Yukagir regard the language of their ethnos as their native language. Retention of Native languages dropped dramatically during the period of large-scale industrial expansion as can be seen from the high use of Native languages recorded in the 1959 census in which 55.9% of all Evenki, 81.4% of Even, 52.5% of Yukagir, and 93.9% of Chukchi spoke their native languages.

Language divides the population of the Republic into two dominant groups, Russian-speaking and Yakut(Sakha)-speaking. The first group is of course more numerous, due not only to the Slavic population but also to the size of the population for whom Russian is the language of official, industrial, and social communication. Yakut (Sakha) speakers include the national intelligentsia and city inhabitants of middle age or younger. The Yakut (Sakha) language is the language not only of the Yakut, but also of a great number of Arctic aboriginals. It is insufficiently introduced into the official sphere and into the educational system. [Editor's note: The Sakha language is equal with Russian as a national language of the Republic according to the Sakha Constitution.]

(4) On the Arctic coastline, generations of indigenous peoples know neither their traditions nor the language of their parents and ancestors. The generation break in language succession contributes to the difficulty in preserving cultural values among these ethnic groups. Ecological traditions are also pressed to change by state institutions and the temporary newcomer population. Some components of ecological knowledge and practice are partly lost. Only realization of a new program of upbringing and teaching will enable the young generations to hold onto their ecological traditions.

- (5) Almost complete disappearance of ethnic territorial boundaries and accelerating genetic mixing have created a mosaic of socio-cultural components in Arctic Sakha which complicates efforts to identify, estimate, and study the degree of preservation of cultural values of the ancient ethnoses. Taking into account the mutual enrichment of cultures due to close contact over many centuries, it is of great concern to study, restore, and preserve the cultural values of ancient ethnoses.
- (6) In the post-Soviet period, traditional belief systems are experiencing efforts at reconstruction. An international conference on shamanism took place in Yakutsk in 1992, and creation of a pagan beliefs center is planned. The artistic culture and ethnic memory of all the indigenous peoples of Sakha-Yakutia bear relics of pagan beliefs. Remnants of animism and totemism have been long kept by people now in middle age, and are preserved at a less conscious level by younger generations. Belief in the necessity to live in harmony with the environment in all its natural manifestations is the humanistic essence of animism and totemism expressed through concepts of blood-kin relationships in a unified, interrelated world. In this respect, revival of pagan beliefs of indigenous peoples may be more important than the introduction of alien religions.
- (7) The ecologically dependent economic systems of the Yakut Arctic remain in a period of extended crisis characterized by drastic reduction of economic activity and living space, an employment crisis, loss of the most important components of work culture, destruction of generational succession of traditions, and fluctuating economic perspectives for those who live on the ethnic territories. Destruction of social and cultural values, lumpenization, losses of the best national traditions, and erosion of moral norms over a long period have brought the indigenous minorities to the edge of de-ethnicization as well as under threat of depopulation.
- (8) In the 1990s, important steps have been taken in the Republic of Sakha to revive the national cultures of indigenous people. An unprecedented rise in national self-consciousness and ethnic self-identification has taken place along with an increase in publications of national culture and folklore. The indigenous nationalities have a historic opportunity to enter the 21st century without an inferiority complex. However,

this short period of cultural revival and development of ethnic cultural values is hampered by weak economic structures. Large numbers of Arctic residents, including newcomers whose emigration back to their original homelands is difficult, are falling into poverty, and the main occupations of the indigenous population (animal husbandry and traditional trades), which are non-competitive in the transitional market economy, are in a depression.

6. Government Structures and Systems

The crisis produced by former state policies toward Northern indigenous peoples has become obvious during the current passage from a centralized system of administration to a democratic, decentralized one. The former paternal policies regarded the indigenous people as the simple objects of administration who could rely on "understanding" of their needs by, and "care" of, the government.

At different stages of Russian history, the impact of government on Northern peoples has varied. The first important legal document of the pre-revolution period was the "Rules on administration by non-Russians" [Ustav ob upravlenii inorodtsami] (1822) which recognized clan communities (rodovyi obshchiny) of non-Russians as the base of self-government and the owners of land.²⁴

In the first years of Soviet power, the "Declaration of Rights of the Peoples of Russia" and the Constitutions of 1918 and 1924 were of great importance. Passage of special Temporary Regulations on the management of the Native nationalities [tuzemnyhk narodnostey] and tribes [plemen] of the Russian Federation Northern borders was also an important step. In the early years of Soviet power, the government recognized clan organizations, then created nomad and national councils on the basis of local traditions of the Native population, established the

²⁴ [See Raeff, 1957 pp. 271-277, for a fuller description of the administrative system put in place by the Speransky reforms of 1822. - Ed.]

Committee of the North, and finally created northern autonomous units of government (national okrugs and rayons).²⁵

The first attempt at the territorial-administrative organization of Northern indigenous peoples took place in the 1920s and 30s, which was accompanied by considerable debate regarding the appropriate mechanisms for governing the region. One school of thought sought to establish special reservations for the northern peoples following from the American experience with so called "special power of aboriginals." The opposing school argued for creation of an acceptable form of national-territorial organization for peoples of the North, taking into consideration their specific historical and traditional development. The second school prevailed, with the decision to incorporate historical traditions by establishing local Councils on the basis of clan organization principals.

In order to deal with the concrete problems facing the indigenous population of the northern region, in 1924 the government established a special Committee of the North under the presidium of the All-Union Central Executive Committee. Its first chair was P.G. Smidovich. The Committee consisted of a bureau, commissions, and local committees. At its first plenum, the Committee of the North decided to organize local committees to carry out national policies of Soviet power, to raise the cultural level of the people, to improve the economic well-being of minorities, and to organize and adapt administrative organs to the local and social conditions of the region.

Accordingly, on November 17, 1924, the Yakut Central Executive Committee formed the first Yakut Northern Committee and appointed its first chairman, P.A. Oyunskii. This Committee developed "Regulations Regarding the Organs of Power of the Nomadic Numerically Small Native Peoples of the Yakut Autonomous Soviet Socialist Republic", which were approved in April 1925 by the presidium of the Yakut Central Executive committee. In accordance with these regulations, each Native minority was to form a distinct group [clan] within its nomadic territory. Between clan meetings, the Clan Councils exercised the duties of protecting clan members' rights, raising economic well-being, and executing the orders of Soviet

²⁵ [For a fuller discussion of these provisions during the Soviet era, see the INSROP Discussion paper for IV.4.1 by Osherenko, et al. (1996), Vakhtin (1992), and Slezkine.—Ed.]

organs. However, only 12 clan councils were formed according to these "Regulations," and therefore did not involve the main part of the northern population.

In 1926, the All-Union Central Executive committee of the Russian Federation established "Temporary Regulations on the Administration of the Indigenous Nationalities and Tribes of the Northern Borders of the Russian Federation" in order to protect rights of the indigenous population and to improve economic and cultural conditions. The organs of northern administration under these temporary regulations included clan meetings, clan councils, regional indigenous congresses, and regional indigenous executive committees. The following year, on October 3, 1927, the All-Union Central Executive Committee and the People's Commissars' Council of the Russian Federation granted the Clan Councils legal functions.

As a result of these measures, for a brief period, self-government of indigenous peoples took root in a democratic way. In February 1927, the first Congress of the Republic minorities took place. The Congress adopted fifteen important amendments and additions to the "Regulations" in response to needs and requirements of the indigenous population. As a result of 1927-1928 elections in the North of Yakutia, 41 clan councils became the transitional form of state power in the North, a form maximally adapted to the history and origin of tundra and taiga inhabitants.

The next stage in administrative development was the creation of national-territorial districts. Fifteen national regions were formed in the localities inhabited by the Evenki, Even, Chukchi, and Yukagir, according to the resolutions on the North of Yakutia of the All-Union Central Executive Committee of December 10, 1930, and May 10, 1931. On August 20, 1933, the All-union Central Executive Committee and the People's Commissars Council established the "Regulations on Nomadic Councils in the National Okrugs and the Russian Federation Northern Borders" which determined the status of the northern regions as national regions and distinguished two types of councils: 1) rural councils with the majority of the settled population, and 2) nomadic councils with the majority of the nomadic population. The Council of the national regions had full authority over industrial and cultural policy in the territories of the indigenous peoples. Thus, as a result of national-territorial division into districts, clan

administration (*rodovoe upravlenie*) was abolished. The clan councils were united into a system of nomadic councils of the northern outlying regions of the RSFSR.

Retreat from policies encouraging Native rights and self-government had already begun in the middle of the 1930s. Under conditions of mass collectivization and "aggravation of the class struggle," the Communist Party bureaucracy in the northern lands and oblasts looked disfavorably on the humanistic activities of the Committee of the North. The organs of national self-government (the indigenous councils) were liquidated, and then, in April 1934, the Committee of the North, the main state organ formulating national and economic policy with respect to the minority nationalities, was abolished. Its functions were first given to the Main Administration of the Northern Sea Route (Glavnoe upravlenie Severnogo morskogo puti, GUSMP) under the direction of Council of the People's Commissars of the USSR, and later these were transferred to the local soviet organs.²⁶ This decision was ill-conceived, as the Main Administration of the NSR did not separately study the problems of northern peoples. Moreover, the local soviet organs were powerless to solve the people's problems.

Various departments and administrations created under the Russian Federation Ministers' Council produced red tape and collected various information but took no concrete measures to extend the rights of indigenous peoples. Assistance for people's material and financial needs came in the form of credits, food provisioning, opening bread supply stores, freedom from taxes, and assistance in regulating state and cooperative trade. Studies of procurement, sale of trade production, and provisioning of the population aimed to improve services and supplies. The government provided organization of veterinary assistance in reindeer breeding, helped construct docking facilities, increase supply inventories, restore game fauna, and build housing for general social-life-style development.

The acceleration of economic reforms, repression against shamans as well as wealthy homesteaders and reindeer herders, and liquidation of self-government and Native rights were also characteristic of other periods of nation building in the North. After the Second World War, some measures were taken to provide material assistance to indigenous peoples. Special

²⁶ [See Slezkine at 275-291 for overview discussion of the period of GUSMP's administration of the northern Native affairs. –Ed.]

resolutions of the Central Committee of the Communist Party of the Soviet Union (No. 300 in 1957 and No. 115 in 1980) accorded privileges to the indigenous population such as financial loans for housing construction and payments for pre-school education. The 1980 resolution proved to be less beneficial than the 1957 resolution, as funds were targeted not to individuals, but channeled through the regional governments. Thus, most assistance remained in the administrative centers where only a small portion of the indigenous population resides. In addition, during the 1970s and 1980s, accelerated industrial development took place without regard for ecological protection, further destroying the basis of traditional economies in the region. This destruction occurred despite arguments made in the middle 1960s by scientists, economists, and ethnographers stressing the need to combine further industrial development with development of trade and rural economic pursuits of the North. As industry developed, Soviet and party organs paid little attention to the historically formed economy and culture of northern people. Resource priority was given to industrial village development at the expense of nationality-based *rayony* (districts).

The loss of rights and lack of social protection increased the social passivity of the northern peoples. In addition, in the 1980s (in contrast to the 1950s) Native residents were almost absent among leading soviet, economic, and party workers.

In the period of *glasnost* of the late 1980s, the Department of Far North and Siberian Ethnography of the USSR Academy of Sciences Ethnography Institute put forward a new conception of "Ethno-cultural Development of the Northern Nationalities under Conditions of Scientific-Technical Progress on the Perspective until 2005." The document, well-received by scientists, workers, and even central ministries and presented in the Russian Federation Council of Ministers, stressed that the accelerated rate of reorganization of the economies, culture and way of life of northern peoples are incompatible with preservation of their unique national cultures. Reorganization, the document asserted, must be differentiated according to the history, culture, and number of peoples, whether they live in dispersed or compact settlements, the role of the traditional branches of the economy, the percent of Natives living amongst another nationality, the level of urbanization, the degree of industrial development in the territory. Further development of the region should follow the traditional branches of the economy and be

in accord with the settlement patterns and way of life. Further development of northern peoples should be evaluated as a whole complex of social, legal, economic, and cultural factors.

On December 13, 1989 in Yakutsk, the founding Congress of the Yakut ASSR Northern Nationalities Association took place. The Congress established the regulations, program, and leading organ of the Yakutia Northern Nationalities Association. The following year, in October, the Association appealed to the Supreme Soviet to include in the Russian Federation Constitution articles which would provide (together with the existing national and national-territorial okrugs), for the creation of additional national-territorial districts (okrugy) on the basis of ethnicity, with a special priority listing for each northern nationality, especially those without any form of national state formation.²⁷ At the same time, the Association council section adopted the "Convention 26" decree, which advocated a self-governing parliament of Northern Peoples with legal status equivalent to that of a republic. The Association urged ratification of the International Labor Organization (ILO) Convention On Indigenous Peoples and Peoples with a Tribal Way of Life (adopted July 1990 in Geneva). The Congress also urged governmental status be given to the regional association of northern peoples, as the association then had no form of recognized national-governmental status.

As of 1994, more than 26,000 members of the small numbered indigenous northern peoples resided in the Republic of Sakha including more than 15,000 Evenki, 9,000 Even, 726 Yukagir, 587 Chukchi, and 400 Dolgan.

In February 1992 for the first time in the Russian Federation, a Ministry on Northern Minorities was created in the Republic of Sakha, to carry out governmental policies to improve the social and economic condition of these northern peoples, to revive traditional branches of the economy, national self-consciousness, language, culture, and art programs. Following creation of this Ministry and the Association of Northern Peoples, Congresses of the Evenki, Even, and Yukagir and Conferences of the Chukchi and Dolgan took place. At each of these forums, the present and future prospects of each of these *ethnos* were constructively discussed and

²⁷ [They sought this authorization particularly to enable formation of a region for the Even. The Even did eventually form their own region, the Even-Bytantaisk region as is discussed below. –Ed.]

appropriate documents adopted. The Ministry has given considerable attention to the meetings and wishes of the northern peoples and the processes of national-territorial formation. This Ministry existed up to December 31, 1993, when Sakha President Mikhail Efimovich Nikolaev by decree formed the Ministry of Sakha (Yakutia) Northern Peoples Affairs. In August 1989, the first national-territorial district [rayon] was formed -- the Even-Bytantaisk national district -- covering the homelands of about half the Even population (almost 6,000 people), who previously had no autonomous status. Additionally, the Anabarskii, Momskii, and Olenyekskii national *ulus* (districts) were formed. National ulus status gives the priority right of legislative initiative in the Republic's parliament, *Il Tumen*, on problems of preservation and development of national culture, national language, and traditional economic activities. Within their territory, the northern peoples have the right to create local administrative-territorial formations, to come to independent decisions on social, economic, cultural, and ethnic development problems.

With the direct participation of the Ministry on the Northern Minorities, the Law "On the Nomadic Clan Community of the Northern Peoples" [O kochevoiy rodovoyi obshchine narodov Severa] was drafted and adopted by the former Supreme Soviet of the Republic in 1992. The official formation of nomadic clan and tribal communities is a new phenomenon in the economic life of the northern peoples. As a result of rural economic reform in December 1993 in the Republic of Sakha there were more than 140 forms of economic organization: 96 clan communities (obshchin), 27 sovkhozes (state collectives), 11 collective enterprises, 4 agricultural firms (agrofirmy), and some joint ventures. Many problems have arisen in the creation of these new forms of "community". Conditions of the undisciplined market and unrestrained price increases make it difficult for small communities to survive. Thus, the future may bring consolidation of small communities (obshchin) or unification into community unions (soiuzy obshchin).

Investment is critical to the social and economic development of the Far North. In 1992, due to financing from different sources, 2 billion, 25 million rubles were used by the Ministry. As a result, 27,500 square meters of housing, schools in 200 locations, and four diesel electric power stations were introduced. In general, however, investment in capital construction is insufficient due to the difficult economic condition of the Republic. The next direction of

ministerial work should be aimed at social assistance: loans for individual building, payment for student study, extraordinary grants, etc.

Until recently, the government devoted little attention to protection of the environment. With industrial urbanization, the ecology of the northern zone deteriorated year after year. However, in the post-glasnost period, protest by indigenous inhabitants resulted in suspension of construction of the Aldan hydro-electric power plant in the Verkhoyansk ulus. The company Yakutzoloto is conducting work to improve the sanitary conditions on the Khroma River. At present, there is a strong protest campaign to halt building of two hydro-electric power stations -the Srednekovmskaya (middle Kolyma river in the Magadan Oblast) and the Uchurskaya (South Yakutia). This campaign was started by popular initiative of three Kolyma ulus along the Kolyma River. There were public meetings with managers of "Kolyma gesstroi" (from Magadan), employees of Nature Protection Agencies of Yakutia and Magadan provinces (oblasty), and with specialists of "Lengidroproject" (Leningrad hydro-electric project in St. Petersburg) between July and September 1990. The local inhabitants of the affected region expressed their disapproval of the project on grounds of negative impacts of hydro-electric power plants on nature and living condition of the native people. An interrregional public Committee on protection of the Kolyma river basin has been organized. Local branches of the Association of Northern minority peoples have played an important part as well. As a result, government organs recognized the need for scientific appraisal of damage due to hydro-electric power plants. An assessment was prepared by research institutions, the nature protection branch of the Yakut Science Center and the state nature protection Committee of the Republic of Sakha in 1991-92. Various Republic agencies (committees, ministries) solve the problems of environmental protection. So the Ministry of Ecology and Nature Use (organized in February 1992) was assigned control by President Nikolaev (Decree of August 16, 1994 "About actions on development of special protected territories") and a preserve "Orulgan-Sis" is to be created in the Even-Bytantaisk ulus as a place of traditional economy of native peoples. The decree includes plans for preserves in Northern Sakha.

In September 1994, the Ministry of Ecology and Nature Use was reorganized as the Nature Protection Ministry of the Republic of Sakha. At the first Congress on Yakutia Nature

Protection, held in April 1995, a resolution was adopted recognizing the important link between ethnic and social protection and nature protection. The resolution stated: "Nature protection has an acute ethnosocial aspect in the Republic. Special attention should be given to the ethnoecological legacy of traditional cultures' nature use, particularly to certify [protect] nature resources of the region where northern indigenous minorities live." Here it is worth drawing attention to the Agreement about demarcation of objects of conduct and authorities between agencies of the Russian Federation State power and State Power Agencies of the Republic of Sakha (Yakutia) of July 1995, according to which protection of environment and ecological security, protection of long-standing surroundings and traditional lifeways of not numerous ethnic communities, and valuing of environmental quality in the Republic of Sakha are related to objects of joint conduct.²⁹

The division focused on humanitarian questions within the Ministry on the Northern Minorities dealt with the revival and protection of northern minorities language, culture and folklore, the problems of education, health care, and personnel training. Through the republic's ministry of education, the concept of national schools has been realized.

In the cultural sphere, ethno-cultural centers have been formed to restore national traditions, ways of life, language and world-outlook. As of January 1995, six national settlements. had the status of ethno-cultural centers. But these also have serious financial troubles as do ethnographic museums, folklore ensembles, and other cultural institutions.

Higher education and training is provided to a relatively small number of the northern minorities of the Sakha Republic. In 1992, only 49 representatives of the minority indigenous

²⁸ Yakutskie vedomosti, April 14, 1995, p. 4.

Article 2, Republic Sakha, July 5, 1995, p. 3. [Under the Constitution of the Russian Federation and the Constitution of the Republic of Sakha, the Republic of Sakha has joint powers (shared or joint jurisdiction) with the Russian Federation. The relationship between the two is set forth in Section III of the Sakha Constitution which requires special agreements to work out matters of joint powers (see Article 40 of Sakha Constitution). Preservation and revival of the Native and less populous peoples of the North and Russian and other old residents are guaranteed by Article 42. The Sakha Constitution also delineates the system of state power in the Republic. Section IV, Article 49 authorizes the state institutions under the Sakha Republic, among other things, "to regulate interrelation of society and nature in order to preserve and to provide for favourable environment" and "to protect sovereign rights of the people, to provide for preservation and development of native language, national culture and identity of the people."—Ed.]

peoples studied in the central and Siberian institutions of higher education, 65 in the Yakut State University, and 22 in the Rural Economy Institute. For the period 1992-1995, four complex programs addressing the needs of minority indigenous groups were accepted by the Government of the Sakha Republic and Parliament (*Il Tumen*): (1) on northern peoples' health care, (2) on protection of motherhood, childhood and family, (3) on the struggle against alcoholism, and (4) on the rehabilitation of social protections for the needy.

Serious steps are now being taken to move away from government policies based on paternalism and charity and to adopt policies that will further self-government of the northern minorities and enable them to take charge of their own cultural and economic revival and development. The prospects for success in making this transition are conditioned by several factors in the developing relations between Moscow and the Sakha Republic as well as within Sakha (Yakutia).

The Sakha Republic was the first in the Russian Federation to begin to realize large governmental legal reform and, with this reform, protection of indigenous minority rights. On February 26, 1991, the Sakha Republic Supreme Soviet adopted the Declaration on state sovereignty, the fourth article of which is devoted fully to the northern minorities. Following adoption of this Declaration, the Supreme Soviet of Sakha adopted a Law on governmental status which declared the rights of the republic: to exercise territorial leadership, to have Republic citizenship, to determine governmental leadership and a Constitution on the territory of the Republic, and to determine its own relations with the Russian Federation on a voluntary and equal basis. This law declares the Sakha Republic's right to choose its own form of national governmental structure, to determine and realize forms and methods of protection of its territory, its constitutional system, culture, way of life and rights of indigenous peoples.

The Federal Agreement, signed in Moscow on March 31, 1992, was an important step in building a new federation corresponding to the modern movement of peoples for democracy in Russia. This agreement is a collective deed of all subjects of the Russian Federation. It marked

the passage from a constitutional federation in Russia to a constitutional relationship fixed by treaty.³⁰

The Constitution of the Republic of Sakha (Yakutia) adopted on April 27, 1992, became a historical marker in the fate of indigenous peoples in the Republic. Adopted only after extensive discussion in the press, it fully takes into account the provisions of the Federal Agreement. This Constitution is the first in the Sakha Republic and Russian Federation to protect, guarantee, and provide for indigenous minorities' rights. The key provisions of the Constitution relating to indigenous minorities are as follows:

Article 42. ...The republic, respecting the traditions, culture and customs of the indigenous peoples and the northern minorities, protects and provides for their inalienable right of:

- possession and use according to the Law of land and resources, including clan agricultural, animal husbandry, hunting and fishing grounds;
- organization of a social and medical program taking into account the economic peculiarities of the living surroundings, economy and ethnic specific character of the human organism;
- protection against any form of involuntary assimilation and ethnocide and also of encroachment on the ethnic originality, on historical sacred places, monuments of spiritual and material culture.

Article 43. On the territory where northern minorities are living compactly, their populations are authorized to create national administrative-territorial formations. The status of these formations is determined by the Law of the Republic.

Aboriginal representation in the governmental system and institutions is guaranteed through the creation of national formations (ulus).

The work of realizing these provisions of the above articles of the Constitution began with adoption of a Law "On Nomadic Clan Community of the Northern Minorities³¹" [O kochevoyi rodovoyi obshchine malochislennykh narodov Severa] (December 23, 1992), as well as

³⁰ Agreement of June 1995.

³¹ See Footnote 3.

other key laws "On Citizenship," "On Languages in the Sakha Republic", and "On Alternative Military Service of the Northern Minorities."

Return of authority to the level of the nomadic Clan Community is an attempt to restore in part the way of life of indigenous minorities. The resolution of the first Congress of the nomadic Clan Communities notes: "...the restored clan communities will become the real social, economic, and spiritual base for revival, further prosperity, and way of life of the northern indigenous minorities as subjects with equal rights in the renewed state."

The problem of implementing self-government by a nomadic clan community as a type of national-territorial formation of indigenous peoples who do not have their own statehood requires thorough study. Moreover, the experience of indigenous peoples of other Northern and Arctic states should be taken into consideration.

The most important problems mentioned above were dealt with in the main provisions of the Sakha (Yakutia) Republic Law "On the Northern Minorities Nomadic Clan Community," adopted on January 15, 1993 at the 16th session of the Supreme Soviet of the Sakha Republic. This law provides the legal basis for dealing with fundamental questions of nomadic clan communities life concerning economic activity, property relations, and environmental protection. The key sections are the General Provision, Property of the Community, Lands of the Community, Guarantees of Traditional Nature Use and Social and Economic Activity of the Community, Community Activity, and Discontinuation of Community Activity.

The problems of providing the community with hunting arms, traps and other trade stock items require special legal regulation. It is necessary to develop a simplified permission system for acquiring, possessing and carrying firearms for hunting in the places of residence and economic activity of northern minorities. Further legislation is needed on local self-government, traditional occupations of northern minorities, training of specialists, northern domestic reindeer herding, housing and social and cultural construction in the compact settlements.

Real reform leading to self-government of northern peoples of the Russian Federation presupposes changes of state policy with respect to management of the northern territories. The Government of the RF has developed a conceptual law "On State Policy in the Northern Regions of the RF." The aims of state policy for the Northern Regions are preservation of the place and

role of its economic complex in the economy of the nation, prevention of destruction of the social and economic systems of the north, and gradual passage into a period of stable development.

In June 1995, discussions took place in *Il Tumen* on the Sakha Republic Law project "About Suktuul of the Yukagir people" to carry out the reform of the northern peoples self-government³². Article 1 of the proposed Law concerns "Suktuul national administrative-territorial formation of the Yukagir people for independent decision of social-economic, cultural and ethnic development problems." House economic building, land distribution, land protection, organization of tribal work, set local dues, and control of observance of nature use legislation are related to exceptional conduct of Suktuul. Suktuul would have the right to check *ulus* agency orders and to initiate legislation. The Supreme chief represents the Yukagir people's interests on the Republic, Federal and international levels, and in sessions of the Government of the Republic Sakha (Yakutia).

At present, the Russian Federation faces difficult political, economic, and social processes. On the one hand, as a result of the slump in production, unemployment is growing, and impoverishment of the population is apparent. The death rate and crime rate are both increasing. On the other hand, democratic processes are more evident, and the principal of federalism is taking hold as the central government and subjects of the federation (such as the Republic of Sakha) build new relationships.

The Declaration on human and citizen rights has been included as an independent section of the Constitution. The RF is considering ratification of the 1989 International Labor Organization (ILO) Convention No. 169 on indigenous peoples. The Representative Chamber of the Republic of Sakha (Yakutia) Parliament (II Tumen) adopted a resolution on November 15, 1994 urging adoption of this Convention. Ratification would open the way to lawful protection of indigenous peoples interests by the RF and its subjects and to realization of Articles 71 and 72 of the Constitution of the RF. Ratification of the Convention would signify a willingness of the RF to provide official state protection for Arctic indigenous peoples, including protection of

³²[Passage of this proposed Suktuul law failed in December 1995 and again in April 1996, but will be brought up again in 1996. Greg Poelzer, Personal Communication to Osherenko, 10 May 1996. -Ed.]

collective property rights to lands which they traditionally occupy, preservation of traditional trades, guarantees of social provisions, and creation of financial and economic conditions for survival of indigenous peoples.

A bill on the Legal Status of Indigenous Minorities passed through the first stage of adoption by the RF Parliament on June 11, 1993, but the Parliament has not yet taken further action to complete passage. This law incorporates 23 of the 46 articles of the ILO Convention and defines "indigenous peoples" more precisely.³³ As of May 1995, only 23 minorities that number fewer than 50,000 people are included in the category of "small numbered [indigenous] peoples of the North" who receive certain rights and privileges. There are 63 such peoples with a total number of 340,000 people. The law addresses some common problems of indigenous peoples that require uniform federal regulations, namely:

- collective rights of indigenous peoples in the organs of state power, local representative bodies of government and administration;
- property rights to land and natural resources in traditional living places,
- guarantees for preservation of language and culture.

The next step is development of concrete provisions for the realization and implementation of this law. Realization of rights should not contradict the principal of territorial integrity of the state. Further development of principals of federalism and local self-government should accord greater rights to the subjects of the Federation. This should be accompanied by protection of the rights of national minorities, women, children, invalids and the aged.

Indigenous peoples seek adoption of the "Declaration of Indigenous Peoples Rights" and representation and participation of indigenous peoples in the work of the United Nations and its organs. Specifically, we recommend that the UN working group on indigenous peoples be given the status of a permanent organ, that indigenous peoples be represented in state delegations in questions and issues affecting indigenous peoples, that a register of indigenous peoples and their organizations be created, that questions on indigenous peoples be resolved using detailed UN

³³ [For a discussion of this draft law, see Z.P. Sokolova, INSROP Discussion Paper. For a brief discussion of the various drafts of this proposed law see Fondahl, 1995, p. 220. –Ed.]

information and conforming to the international standards of human rights and protection of Native languages, and that the UN increase technical help in programs for indigenous peoples.

The central problem of indigenous peoples' survival and revival remains unsolved; namely, the right of priority use of nature in the places they inhabit, that is, a right which protects their economic interests. At the same time, we recognize that a new population of peoples became northern inhabitants and took root in high latitudes. They also must have rights and duties to provide for their well-being. Standards for provisions and services must be adapted to the specific requirements of living and working in the northern environment. Economic accords among northern states and cooperation in trade, transport, and communication are essential in this regard.

7. Archeological and Cultural Resources

This section focuses on the identification and protection of cultural and archeological sites. The protection of such sites is a critical and problematic aspect of further development of the NSR.

The opening of the Arctic to human habitation is closely connected to the development of ancient cultures in Yakutia, cultures which inhabited areas encompassing more than a quarter of the Eurasian polar regions including Taymyr in the west and Chukotka in the east. Several important archeological questions are common to this vast region of northeast Asia: 1) when and along what routes did humans settle the Arctic coastline; 2) when did humans begin moving from northeast Asia to America; 3) what are the origins of the indigenous Arctic peoples (the Yukagir, Chukchi, Koryak, Even, etc.); and 4) how have humans adapted to the extreme conditions of the Arctic? Many aspects of these questions have been studies by V.1. Jokhelson, V.G. Bogoraz, A.P. Okladnikov, Yu.A. Mochanov, S.A. Fedoseeva, I.V. Konstantinov, V.G. Argunov, S.F. Kistyenyov, and others.

More than 300 archeological sites have been identified within the polar regions of the Sakha Republic and more are expected to be discovered as research continues. The majority of these sites were discovered and studied by members of the Lena archeological expedition,

led by Yu.A. Mochanov. Most of these sites are temporary (short-term occupation) hunting camps and contain artifacts from more than one culture. As a result, it has been very difficult to identify distinct cultural complexes. Regardless of the difficulties encountered, many of the Arctic sites contain a wealth of information characterizing the different stages of ancient Yakutian cultures, beginning as early as the Paleolithic period.

No essential cultural differences between northern and central Yakutia are visible in the archeological record. Within the entire territory of Sakha-Yakutia, including the polar regions, distinct cultures appeared in succession, one replacing another through time.³⁴ Yu.A. Mochanov developed the following typology of Yakutian cultures:

Paleolithic cultures

Diuktai (from 35,000 B.C. ± 1 -5,000 years to 10,500 ± 1 -100 years)

Sumnagin (from $10,500 \pm 100$ years to $6,200 \pm 100$ years)

Neolithic cultures

Syalakh (from 6,200 \pm 100 years to 5,200 \pm 100 years)

Belkachi (from 5,200 \pm 100 years to 4,100 \pm 100 years)

Ymviakh-takh (from $4{,}100\pm100$ years to $3{,}300\pm100$ years).

These are followed by the *Ust Mil'* s culture of the Bronze Age (from $3,300 \pm 100$ years to $2,400 \pm 100$ years) and various early Iron Age complexes (from $2,400 \pm 100$ years to 500 ± 100 years).

Mochanov developed this typology of ancient Yakutia cultures through the analysis of complex, stratified archeological sites and with the cooperation and contributions of geologists, permafrost specialists, paleontologists, and geochronologists.

Analysis of archeological data from these sites shows that the replacement of one culture by another took place not as the result of social, economic, or ecological factors, but was primarily due to the repeated migration of groups from the south and south-west. The new arrivals pushed part of the aboriginal population to areas with less favorable living

³⁴ [In this connection, see volume 28, no. 4 of *Soviet Anthropology and Archeology* (1990) entitled, "Bridging the Bering Sea: Soviet Archaeological Discoveries in Siberia" edited by Balzer. –Ed.]

conditions and assimilated those who remained. From the interaction between the aboriginal population and the new arrivals, new cultures emerged.

Today there can be no doubt that the sources of ancient American cultures belong to the Diuktai Paleolithic tradition with bifacial tools. First settlement of the New World originated from Yakutia through Chukotka and Alaska along the Bering land bridge. Probably, Clovis culture with bifacial tools originating south of the Canadian glacier is connected with these populations. American colleagues have not raised doubts about the ancient cultural complexes of Alaska originating from the Diuktai culture of Yakutia³⁶. As Yu.A. Mochanov considers Diuktai mammoth hunters to be the obvious ancestors of North American Indian populations who had physical anthropological similarity with Mongoloids of Central and Eastern Siberia.

Among the more well-known archeological sites in the Arctic regions of the Sakha Republic, the following should especially be noted:

- The Yakutskii Tyubelyakh site (Anabarskii ulus) was discovered in 1960 by F.F. Ilyin, and I.V. Konstantinov completed excavation in 1976. The site is located on the right bank of the Anabar River, 75 kilometers from its mouth, 18 kilometers above the Yuryung-Khaya settlement. Nearly 900 stone artifacts characterizing the Sumnagin culture of the late Paleolithic period (9th-10th millennia B.C.) were found at the site.
- The *Khorbusuonka I* site (Bulunskii *ulus*) was discovered in 1967 by famous Sakha archeologist l.V. Konstantinov. It is located on the right bank of the Olenyok River, 230 miles from its mouth. Cultural artifacts were collected from the surface of a 20-23 meter terrace: 1,440 stone objects, one bone arrow head, and 70 ceramic fragments were found. After examining the stone and ceramic inventory, Konstantinov concluded that all three stages of the Neolithic in Yakutia were represented at the site.
- The *Uolba I* site (Bulunskii *ulus*) was discovered in 1942 by A.P. Okladnikov. It is located 20 kilometers south-west of Zhigansk settlement, on the left bank of the Lena River, 70 kilometers from its mouth. The site sits at the height of the Lake Uolba

^{35[}Ibid.]

³⁶ Powers, 1973; Haynes, 1978; Hadleigh-West, 1980.

riverine terrace. In 1943 Okladnikov defined two temporally-distinct cultural strata in the site, referring to them as "upper" and "lower". He considered all artifacts from the lower stratum to be of the same age and to date from the middle stage of the Neolithic, from the third millennium B.C. to the new era. V.G. Argunov attributes the findings at the Uolba I site to the Belkachi and Ymyikh-takh cultures of the Neolithic in Yakutia.

- The *Uolba burial ground* (Bulunskii *ulus*) was discovered and excavated by A.P. Okladnikov in 1942. The site consists of two burials located near the Uolba I site. Okladnikov considered the burial ground to be more ancient than the Uolba site. The cultural affiliation of the burial site has not yet been determined.
- The multi-strata *Siktya I* site (Bulunskii *ulus*) was discovered on the left bank of the Lena River, 450 kilometers from its mouth, in 1943 by Okladnikov. The site is situated on a stone terrace where the old settlement of Siktya used to stand. In the process of excavating 20 square meters, Okladnikov recorded three cultural levels. The first level had remains from the early Iron Age and the second level supposedly dated to the late Bronze Age. The third level, also dating to the Bronze Age, was rich with finds: stone objects, ceramics, copper ingot, and animal bones. In 1973, 1977, and 1979 the Siktya site was studied by the Nizhnelensk detachment of the Lena archeological expedition led by Yu. A. Mochanov. During the excavations on the 296 square meter site, they were able to define the stratigraphy more precisely, revealing seven cultural levels dating from the early Neolithic through the early Iron Age. SiktyaI site thus provides a chronology of cultural development in this part of the Arctic. The Siktya I site itself was occupied by humans for 6,000 years.
- The *Ichchilyakh burial* (Bulunskii *ulus*) was discovered and excavated by Okladnikov in 1943. It is located one kilometer below the settlement of Govorovo, on the left confluence of Ichchilyakh, the left tributary of the Lena, 429 kilometers from its mouth. A. P. Okladnikov dates this burial to the second half of the second millennium B.C. and refers to it as Bronze Age. S.A. Fedoseeva considers this burial to belong to the Ymyiakh-takh culture, dating from the end of the second millennium B.C.

- The Burulgino site (Allaikhovskii ulus) was discovered in 1959 by Z.V. Gogolev and S.A. Fedoseeva, participants in the Yukagir expedition of the Language, Literature and History Institute of the USSR Academy of Sciences, Siberian Department, Yakutia Branch and the Institute of Ethnography, Academy of Sciences, USSR. The sight is situated on the left bank of the Indigirka River. The Lena archeological expedition conducted excavations at the site from 1971-1973. Excavations revealed three cultural levels and a rich collection of materials, including objects of stone, bone, ceramic objects, and more than 1,500 northern reindeer and elk bones. S.A. Fedoseeva believes that the Burulgino site is one of two northeast Asian multi-strata sites containing three successively deposited Ymyiakh-takh layers and is the only multi-strata site which does not contain artifacts from other cultures.
- The Berelekh site (Allaikhovskii ulus) is located on the left of the upper reaches of the Berelekh River (the left tributary of the Indigirka River, 100 kilometers above Chkalovo). The Lena archeological expedition (led by Mochanov) discovered the site at the location of a well-known "mammoth cemetery" in 1971. Excavations uncovered 127 stone objects, 49 bone objects, 1003 bones of mammoth, bison, and horses; 5 stone pendants, a fragment of mammoth tusk with a depiction of a mammoth on it, and a spear made from mammoth tusk. Radiocarbon dating of the mammoth tusk yielded an age of 12,240 ± 60 years. Analysis of the Berelekh site materials fixes the latest stage of the most northern extent of the Diuktai culture at 13,000-12,500 before present, making this site the northernmost upper Paleolithic site in the world to date.
- The Rodinka women's burial (Nizhnekolymsk ulus) was discovered in 1980 by S.P. Kistenyov. It is located on the right bank of the Panteleikha River (the right tributary of the lower Kolyma) in the center of the Rodinka II site. At the present time this is the northernmost Neolithic burial in the world. The radiocarbon age, from bones obtained by L.D. Sulerzhitskii, is 3,600± 60 years old. The inventory from the burial consists of 100 pieces of stoneware and 70 objects made of mammoth tusk, northern reindeer ribs, animal canines, and bird bones. The burial site retained elements from the middle

Neolithic Belkachi culture, around 3,000 B.C. Today it has the status of a state protected site.

• The Panteleikha I site (Nizhnekolymsk ulus) was discovered in 1970 by Yu. A. Mochanov and S.A. Fedoseeva. It is located on the right bank at the mouth of the Panteleikha River, 132 km. from the mouth of the Kolyma, and is not far from the Cherskii airport on a 20 meter eroded terrace. S.P. Kistenyov studied this site from 1977-1978. Artifacts recovered include 1,005 pieces of worked stone and 252 ceramic fragments. Materials representing all of the Neolithic complexes in Yakutia, and the early metals ages (Bronze age and various early Iron Age complexes) were found at this site. It has the status of cultural monument today.

Even a cursory review of the more significant archeological sites of Yakutia's Arctic zone reveals the unique and rich archeological resources of the polar regions. At the same time, it is important to recognize that the Yakutia region has not been studied sufficiently. Future prospects for fruitful research require the extension of the research area, both on the mainland and to the Arctic Ocean islands.

The protection of the cultural heritage of the Arctic is of great importance today. Accelerated development of the mining industry, the increase in Arctic settlements, including those connected with international use of the Northern Sea Route, and the extension of quarry works are all causing the destruction of many archeological sites. There is also reason to be anxious about the state of other sites of the polar region's history and culture: the grave of De-Long, the grave of Pronchishcheva, the pedestal on the northernmost point of Eurasia (77 degrees north latitude), monuments to S. Dezhnyov and the Russian hydrographic expedition, etc. It is necessary to seek methods of improving and protecting their condition and adapting them for the creation of different types of cultural centers. It is also important to consider specific reserves in this plan, the creation of new sites and inclusion of them in Arctic tourism programs. The publication of special brochures, leaflets and lectures would also help attract attention to the region, its main monuments and values.³⁷

³⁷ [Educational tools should be developed as guides to protection of archeological and cultural sites and materials. –Ed.]

A successful model for international scientific cooperation in archeology and related fields is the work on the history of the Jesup North Pacific expedition. The main tasks for the participants of this expedition were research of the cultures of the indigenous peoples of northeast Asia and northwest America and observation of their interconnection and influence upon one another. Two important aspects of this expedition were the cooperative study of the peoples of two continents and the participation of both American and Russian researchers.

The North Pacific expedition worked out a base of comparative study for Asian and American "ethnoses" and formed ideas about ethnographic spheres. The scientists came to a conclusion about the existence in antiquity of a united complex of cultures which formed simultaneously in the old Worlds of the northeast and northwest. They also worked out a history of the similarities and differences of the Asian and American indigenous peoples. The researchers wrote about the ethnic community of the North Pacific peoples and about the presence of a simple polar culture of numerous ethnoses and about characteristics of the latter.

The Jesup project could be used as a model for developing further international multidisciplinary collaboration to extend our knowledge about the history and culture of the regions bordering the Northern Sea Route, to answer unsolved questions regarding the prehistory of Arctic peoples, and to identify and protect cultural and archeological resources. We suggest integrating the scientific and cultural potential of the region in keeping with policies of unifying Native peoples of the Arctic in as short a time as possible.

8. Conclusion

Understanding the impacts on Arctic indigenous peoples of the opening of the NSR in the 1930s is the starting point for assessing future impacts of expanded international use of the NSR. Many problems that indigenous northerners face today were initiated directly or indirectly by the development and administration of the NSR and related industrialization. This study suggests problems to be avoided in expanded plans for use of the NSR as well as revealing long-standing problems that need to be rectified.

Although opening of the Northeast Passage initially aimed to serve the military and strategic interests of Russia, and then of the former USSR, the development of transportation

along the Northern Sea Route affected much of the economy of Yakutia. The NSR has had four important impacts on the economy and development of the Republic of Sakha (Yakutia):

- 1. Successful development of navigation along the Arctic coast of Yakutia ended transport isolation of Yakutia's northern regions by opening the possibility for navigation on Yakutia's northern rivers: the Kolyma (from 1932), the Yana (1936), the Indigirka (1936), the Olyenyok (1937), and the Anabar (1938).
- 2. The NSR improved provisioning of the northern and Arctic counties (ulusy) and increased the material well-being of their populations, providing them access to the achievements of European civilization (equipment, clothes, food, etc.)
- 3. The rise of coal mining, shipbuilding and timber industries began with development of transportation along the NSR and navigation on the northern rivers.
- 4. Industrial mining of gold and tin deposits of Northern Yakutia became possible after creation of a stable transport scheme. Food, fuel, equipment, and lumber for construction were imported along the NSR from industrially developed regions of the country to open up regions of Verkhoyanye, Indigirka, and Kolyma from which raw materials were extracted and exported.

As a result of opening of the NSR, a distinctive Soviet Arctic system of transport communication was created. Yakutia became a key area in the supply of raw materials from the Northeast serving the USSR military- strategic base.

The NSR's influence on the Arctic indigenous peoples cannot be separated from the political, economic, social, and cultural changes which took place as a result of acceleration in the building of socialism and industrial development of the former USSR's northern territories. The processes of collectivization, transformation from nomadic to settled patterns of living, division into regions, the "cultural revolution", transfer of hunting grounds and reindeer pastures to control by industrial enterprises, conversion of natural resources to state property, and state monopoly of fur trade production all provoked negative changes in demographic development, traditional models of economy, environmental, social and cultural systems of the Arctic's original peoples.

Development of Arctic navigation provoked serious changes in the life of northern Yakutia's indigenous population. Six key problems resulting directly and indirectly from development of the NSR are summarized here.

- (1) Demographic change. The large influx of newcomers and prisoners increased the population of the Republic's five Arctic *ulus* almost eight fold. Eleven new urban settlements arose, and population density increased by a factor of 4. The relative number of indigenous people in Ust-Yanskii *ulus* was reduced to only 10.9%; in Nizhnekolymskii, to 17.2%; in Bulunskii, to 27.9%; in Allaikhovskii, to 41.9%, Anabarskii, to 48.8%. The increased concentration of population in the Arctic zone exceeded the ecological capacity of the territory and provoked serious ecological problems (fires, water pollution, soil destruction, and degradation of flora and fauna). The newcomer population negatively affected the preservation of traditional moral values, traditions for the protection of nature, and the indigenous way of life. During the last few years, in connection with reduction in transportation along the NSR and changing economic and political processes in Russia, an out migration from the Arctic zone of the Sakha Republic has occurred. This has provoked problems connected with the provision of work, transport resources, and reduced availability of social and health services.
- (2) Aggravation of social conditions. Demographic as well as environmental changes altered vital social relationships and activities. The social service infrastructure education, health care, culture, trade, and social services built mainly in the years of the "cultural revolution" in the 1930s and '40s is now in poor condition due to the policy of financing the non-industrial sphere with only "left-over" funds in comparison to the rest of the Republic. The Arctic ulus, compared to the rest of the Republic, have the most inadequate housing and other buildings essential to health, education, and welfare of their population.
- (3) Environmental damage connected with development along the NSR and northern rivers negatively affected the traditional economy of the indigenous population, eliminating and degrading reindeer pastureland, fish stocks, and flora and fauna upon which the indigenous and long term residents of the region depend.
- (4) Injury to the traditional economic base resulted from intensive exploitation of renewable and non-renewable resources of the Arctic zone. Giving constituent status to the

traditional types of economic activity (reindeer breeding, fishing, hunting trade) on the one hand provided the indigenous population with high employment and state grants for development of these branches of the economy. On the other hand, it led to intensive exploitation of the region's fish and fur stocks. Economic activity central to indigenous lifeways were converted to subsidiary branches of the Soviet economy serving transport and industrial demands of Polar regions production. This precipitated the crisis of the northern economy today, as traditional pursuits are becoming the only means for self-provision of the Arctic indigenous population.

- (5) Lack of involvement of indigenous peoples in the northern work force. The small numbers of indigenous peoples in the industrial work force is conditioned by state policy on the formation of work resources as well as by the state interest in preservation and development of the traditional branches of the economy. At the first stages of opening the NSR, rather wide use of the local population (mainly the more populous Sakha-Yakut) for loading and unloading ships and working in the coal mine industry was typical but, later, came to be replaced by prison labor.
- (6) Cultural values destruction. Influences connected with opening of the NSR have brought the northern indigenous populations of Sakha to the threshold of de-ethnicization, and the smallest minorities to the threat of extinction. On the Arctic coastline, whole generations have grown up not knowing their own traditions and languages. The break in succession of generations speaking their native languages threatens preservation of the cultural values and concepts embedded in and transmitted through the language. The ecological culture, life philosophy, and way of life was pressured to change by state institutions and the massive newcomer influx.

Increased international use of the NSR will undoubtedly exacerbate the existing social problems of the region. Increased rates of transport and volumes of cargo further the possibility of ecological damage and increase anxiety about potential damage. Pollution of the continental shelf zone and the Arctic Ocean coastline would threaten the unique reserve of Arctic flora and fauna, fish spawning grounds and bird rookeries, and could destroy the ecosystem balance of the north, thereby destroying the natural base for indigenous peoples.

At present, among the Arctic ulus of the Sakha Republic, fishing remains the sole basis of traditional economy, income source and means of family subsistence. According to data from

B.V. Ivanov, only the Republic's Arctic regions still show stable or rising fish catches. In the tragedy of the Vilyui River basin in the more southerly part of the republic, one can see the inevitable connection of water basin pollution to a worsening of all spheres of vital activity, including shortening the life spans of indigenous peoples. The inhabitants of the Vilyui basin became victims of an ecological catastrophe provoked by many years of pollution from wastes of diamond mine extraction.

Economic perspectives connected with the NSR must not contradict the indigenous populations' interests in environmental and ecological stability. In this connection, it is necessary to:

- (1) further improve legislative mechanisms for environmental protection, traditional methods of management, ethnic territories, and Arctic Native peoples' rights;
- (2) adopt measures to protect the interests of indigenous peoples and increase environmental protection, especially through the international Convention on the Prevention of Pollution from Ships (MARPOL '73 and '78), creation of special marine protected areas, accession to ecological codes of conduct, and extension of national park networks that incorporate protection of continued activities by indigenous minorities;
- (3) constantly monitor environmental changes and make preliminary ecological and economic examination of the NSR's use:
- (4) create a special fund (with payments from commercial activities using the NSR) to support social development programs of native peoples; and
- (5) develop programs of Arctic tourism to discover the natural, historical, archeological, and cultural monuments; work out routes and information maps; and publish guides and directories.

This study has provided essential background information needed to assess the possible impacts of the NSR on social and cultural systems of the Arctic zone of the Republic of Sakha. However, further research and assessment is necessary to examine more detailed demographic, economic, ecological, social, and cultural processes among the region's indigenous population. Archeological and anthropological field research are necessary to understand the historical impacts of the NSR on the region and to assess the current and potential impacts. Comparative

studies, for example, of preservation and culture change of the Yukagir and the Russian starozhily (old residents) in the Nizhnekolymskii ulus and the rural Allaikhovskii ulus could provide not only purely scientific, but also practical results which would help us to develop recommendations on indigenous social and cultural systems, cultural and archeological resource protection, and commercial use of the region's natural resources. A wide spectrum of sociological research of the zone of possible influence by the NSR is necessary. Opinion polls of different categories of north Sakha Republic local populations – indigenous and newcomer – would help not only to reveal the formation of public views but also to provide valuable material for study of ethnic problems in the region. Such polls would reveal the influence of transport and industrial development on value systems, ethno-psychological characteristics, and the real level of life of the Arctic population.

The study of the impacts of increased international use of the NSR on demographic development, methods of traditional economy, and the life of Arctic coastal indigenous peoples has just begun. Further efforts are needed to integrate scientists of different countries and to integrate knowledge of different fields of study.

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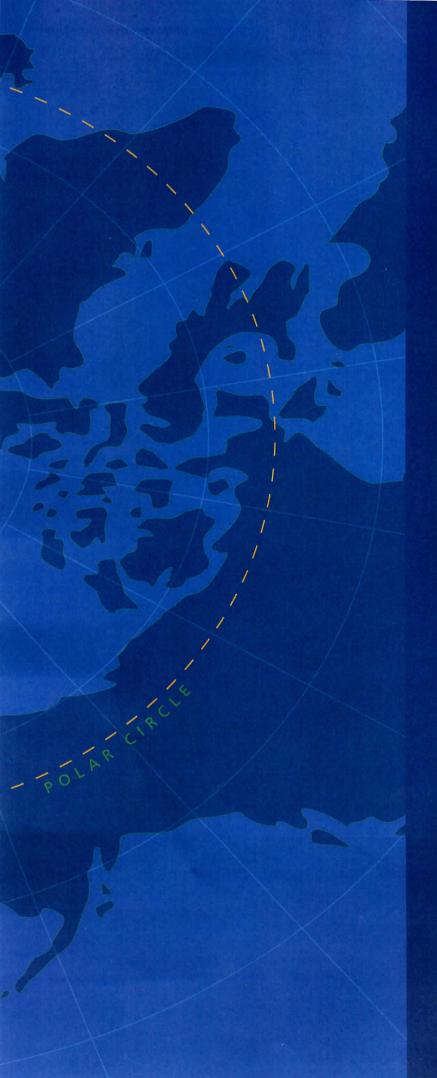
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The three main cooperating institutions of INSROP



Ship & Ocean Foundation (SOF), Tokyo, Japan.

SOF was established in 1975 as a non-profit organization to advance modernization and rationalization of Japan's shipbuilding and related industries, and to give assistance to non-profit organizations associated with these industries. SOF is provided with operation funds by the Sasakawa Foundation, the world's largest foundation operated with revenue from motorboat racing. An integral part of SOF, the Tsukuba Institute, carries out experimental research into ocean environment protection and ocean development.



Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia.

CNIIMF was founded in 1929. The institute's research focus is applied and technological with four main goals: the improvment of merchant fleet efficiency; shipping safety; technical development of the merchant fleet; and design support for future fleet development. CNIIMF was a Russian state institution up to 1993, when it was converted into a stockholding company.



The Fridtjof Nansen Institute (FNI), Lysaker, Norway.

FNI was founded in 1958 and is based at Polhøgda, the home of Fridtjof Nansen, famous Norwegian polar explorer, scientist, humanist and statesman. The institute spesializes in applied social science research, with special focus on international resource and environmental management. In addition to INSROP, the research is organized in six integrated programmes. Typical of FNI research is a multidisciplinary approach, entailing extensive cooperation with other research institutions both at home and abroad. The INSROP Secretariat is located at FNI.