



Nganasans boy from the Piasina River in Central Taimyr, Russia  
Photo © Konstantin Klovov

# Reindeer Husbandry in Russia

## Introduction

Russia has about two thirds of the world's population of domesticated reindeer. They are herded on a territory of more than three millions of square kilometers on the tundra, forest-tundra, taiga and mountain areas. The reindeer husbandry in Russia is the basis of the cultures of many northern indigenous peoples, who have various traditions and wide experiences of reindeer herding in a diversity of landscapes. Domesticated reindeer allows them to live in harmony with the extremely severe natural conditions of the Far North. Many herders say: "Our people will live as long as the reindeer are here. If there are no reindeer –there will not be our people".

Today the reindeer husbandry in Russia is receding. In several districts it has completely disappeared. The

total number of domesticated reindeer has decreased from almost 2.5 millions to 1.2 million. The recession of the reindeer husbandry is dramatic for a number of reindeer herding peoples, since the reindeer economy is the major factor of their ethnic consolidation.

This chapter will focus on the present situation and trends in the reindeer husbandry with connection to the life of the indigenous peoples, as well as the changes of economic priorities arising as a consequence of the transition in the Russian economy. Since the situation in the reindeer husbandry all over the huge territory of Russia is very various, the analyses has been made according to the main zones and types of reindeer husbandry in Russia. Many concrete examples from the regions of reindeer husbandry studied during field works are given.

## Collected data

This chapter is written on the base of three main sources of data:

- four special reports written by Russian experts: Evgeni Syroechkovskii (Wild reindeer), Marina Zen'ko (Legal status of reindeer husbandry), Atriom Rybkin (National management of reindeer husbandry), and Aleksandr Komarov (Reinder Herder Union of Russia);
- four reports on field works conducted by Konstantin Klovov and Johnny-Leo L. Jernsletten in four reindeer husbandry regions of Russia (Murmansk Oblast', Yamal-Nenets Autonomous Okrug, Yakutia and Chukotka);
- statistic data, collected during fieldworks and received from the Russian Ministry of Agriculture and the Reindeer Herder Union of Russia.
- Maps are made by Olga Petina.

## Reindeer herding peoples

Unlike Norway, Sweden and Finland there are many different peoples engaged in reindeer husbandry in Russia. Representatives of the 16 reindeer breeding peoples are in the official list of indigenous small-numbered peoples of the North. Besides them, separate groups of Komi and Yakuts are also engaged in reindeer husbandry, but they are not included in the list, because their number is over 50.000. There are no Russian reindeer herders now, but Russian often work in reindeer enterprises as administrative officials and as specialists (veterinaries, zootechnicians, accountants) or work with equipment (mechanics, drivers of tractors, land-rovers, etc.). It should be noted, that reindeer husbandry in Russia is not an exclusive right for indigenous peoples.

Nenets, Komi, Saami, Evens, Evenks, Chukchi, Koriaks, Khants, and Dolgans have cultural traditions closely connected with reindeer breeding, their mode of life and economy depend mostly on reindeer (see map this page).

From a cultural point of view there are four types of reindeer husbandry in Russia:

Map 1: Areas of Reindeer Husbandry, Indigenous Peoples in Russia





Chukchi from the Basin of Belaya River in Central Chukotka, Russia

Photo © Konstantin Klovov

- Saami's,
- Nenets' and Komi-Izhems',
- Tungus-Yakuts',
- Chukchi-Koriaks'.

This classification reflects the history of reindeer husbandry during the last centuries. Types of reindeer husbandry differs in the means of reindeer keeping, making equipment (sledge, harness), nomad dwelling (chum, yaranga, balok), clothing and shoes, means of using animals for transport (different types of harnesses, using reindeer for pack and saddle), milking (or not) females, using (or not) dogs for reindeer pasturing, construction of fences, sheds and other means of the traditional economy.

For example, some distinctive features of the Nenets' and Komi-Izhems' reindeer herding are: herd preserving and directing during the whole day; reindeer herding with aid of dogs and reindeer teams; using sledges all over the year; lack of saddle- and pack-reindeer. Reindeer herders live in conic chums.

The Chukchi-Koriaks use sledges of very different construction than Nenets' ones only in winter. During the warm seasons herders move on foot, without harnessing reindeer even when they migrate from one place to the other. The traditional dwelling of the reindeer herders is the yaranga.

Various reindeer transport (sledge-, saddle-, pack-reindeer) is in use among the Tungus-Yakuts' reindeer herders. Fences are also wide-spread, as well as different additional fodder.

To let reindeer "loose" or "semi-loose" while herding is a Saami tradition.

The largest reindeer stock in Russia belongs to the Nenets and the Komi-Izhems, then Chukchi-Koriaks, Tungus-Yakuts and Saami.

The traditions of different reindeer herding peoples are significant even today. Now, in the period of reforms, under sharp changes of economic and social conditions of life, they influence greatly on their choice of economic strategy and ways of adaptation to the market economy. Here are some examples.

The Nenets who are the most numerous indigenous people engaged in large herd reindeer husbandry - have very close connections with their animals. Private reindeer are the main source for their survival, size of the herd indicates social status. The growth of ones own reindeer herd is the main task for each Nenets' reindeer herder. Reforms of the last years stimulating development of private business are good for Nenets' reindeer breeding development.

The Chukchi, who traditionally also have large herds, do not have the same close connection with their reindeer as the Nenets. One can find as explanation to this in the history of the people, which has





Dolgans from Ust' Avam settlement in Central Taimyr, Russia

Photo © Konstantin Klokov

been divided into two groups - reindeer breeders and sea hunters. In different periods of history most part of the Chukchi changed reindeer herding for sea hunting and then back again, according to changes of natural and economic conditions. Now, the number of Chukchi engaged in reindeer herding notably shortens and the number of hunters on sea mammals grows.

The Evenks, among other small-numbered indigenous peoples inhabiting the Siberian taiga (Mansi, Khants, Selkups, Evens, separate groups of Yakuts, Yukagirs, Tuvinians-Todgins, Tofalars, Oroks, etc.) have been mainly connected with transport-using reindeer herding. Their reindeer are rather domesticated (much more than reindeer of other peoples) and not afraid of people. Traditionally they were very careful about their reindeer, which were not slaughtered except in special cases. They had no tendency to make the herd large, because such a herd would take too much time and prevent them from hunting. At the same time they have never been afraid of losing them, because even an absolute lack of reindeer wouldn't deprive them of means of subsistence. Reindeer losses were very common for taiga hunters recently. Under favorable circumstances they bought

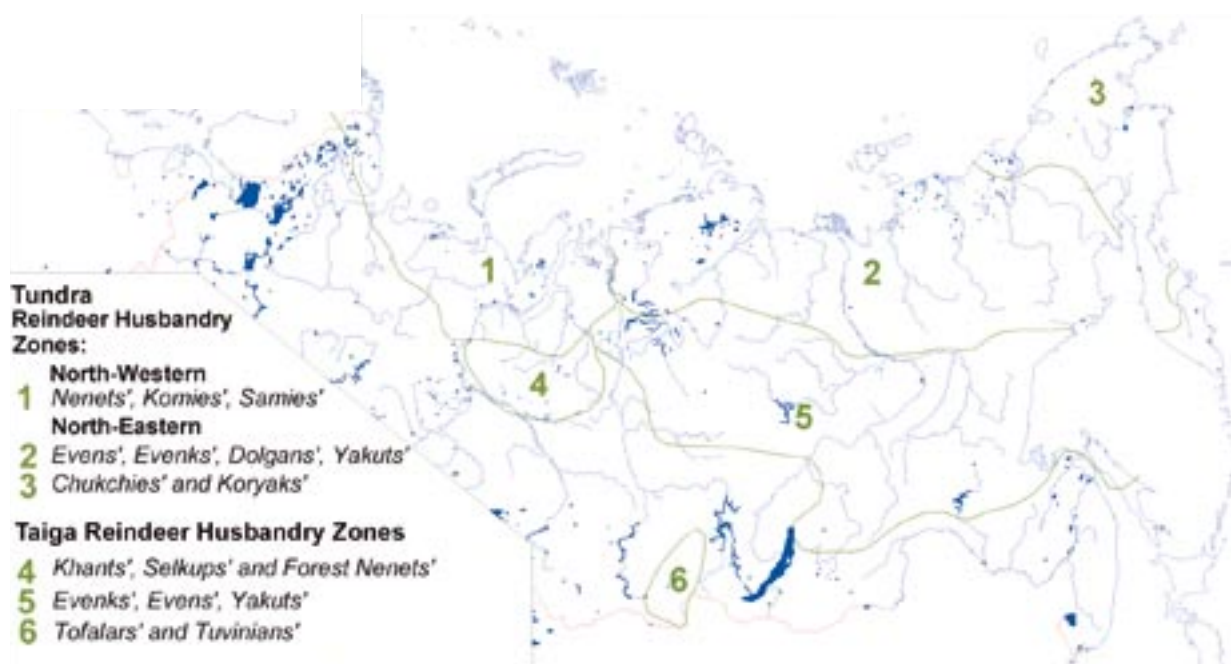
reindeer again. Now such traditions are not favourable for the development of large herds of reindeer for meat production.

The number of people involved in reindeer herding shortens in Russia. Kets, Nganasans, Karels and separate groups of the Russian population (Pomors in Murmanskaya oblast', Symski old-believers in Krasnoyarski krai, etc.) kept reindeer several decades ago, but have lost reindeer husbandry now.

## Main types of reindeer husbandry

On the large territory of the Russian North there is considerable variety of forms of reindeer husbandry (see map opposite page). This fact is important because different types of husbandry requires different approaches in management. In general one can divide the diversity in reindeer husbandry forms into two main types. We will name them "tundra type" and "taiga type" of reindeer husbandry.

Map 2: Different Types of Reindeer Husbandry



### *Tundra Reindeer Husbandry*

The first type covers almost all the tundra and forest-tundra in Russia (except Taymyr which is occupied by a large wild reindeer population) and also mountainous taiga areas situated mainly in the North-Eastern part of the country.

The reindeer herds have long migration routes, usually several hundreds kilometres. During summer the reindeer graze the shores of the northern seas and during winter in the forest-tundra and northern taiga. In forest-tundra and mountainous landscapes herds graze the whole year round in the same area including both forests and tundra territories providing good grazing in different seasons. Migration routes are much shorter than on the tundra – not more than one hundred kilometres.

The herds in reindeer husbandry of the tundra type are big: 1000-3000 animals or even more. The “close” herding method typical for Nenets', Komi-Izhems' and Chukchi-Koriaks' traditions is most common. The Saami's tradition of “loose” herding (without continuous control over the reindeer herd) is used on Kol'ski Peninsula together with the “close” herding.

The main aim of reindeer husbandry of this type is meat production. Now there are enterprises oriented not only on meat, but also on soft antler production or on full using of all reindeer resources including skins,

antlers, blood, endocrine glands, etc. The structure of the herds depend on the type of husbandry: enterprises try to enlarge female number for meat production, or male number for production of soft antlers.

According to D. I. Syrovatski's data (2000) under modern conditions, if the husbandry is organized in a rational manner, meat should cover about 2/3 of the total income from the production. Today reindeer enterprises get their profits almost only from meat production.

For herders engaged in the tundra type of reindeer husbandry, reindeer are the main (and sometimes the only) means of subsistence. The territory occupied by this type of reindeer husbandry can be divided into two zones - North-Western (from western border of Russia to Yenisei) and North-Eastern (from Yenisei to the Pacific ocean).

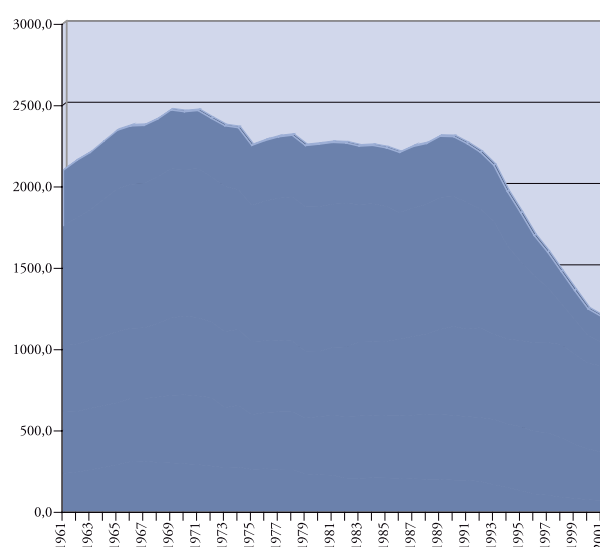
### *Taiga Reindeer Husbandry*

The taiga type of reindeer husbandry is quite different. The herds are not large: usually a few hundred animals. There are no long migrations. The “loose” or “free-camp” herding are used, when animals graze alone, periodically coming to herders' houses or camps. Sometimes reindeer are kept on territory completely fenced.

Such husbandry is mostly oriented towards subsistence and transport. It does not produce a lot of meat, as the reindeer are used mostly for the transport needs of indigenous populations especially during the fur animal hunting season. The reindeer also supply the herders' families with meat and skins. Main income comes not from the reindeer themselves, but from products of hunting with aid of these animals (mainly from fur skins).

In the past, up to the end of the 1950's - beginning of 1960's, reindeer of the Russian North were used for post and pack transportation, and reindeer owners had their main income from reindeer rent. Large herds were held especially for this purpose. Before the establishment of *kolkhozes*, some reindeer herders' families (especially Evenks', Evenks', Khants') had

**Figure 1: Dynamics of Number of Domesticated Reindeer in Russia, in Thousand**



thousands reindeer for transport. Later the *kolkhozes* and *sovkhozes* in the taiga zone had big profits from the rent of transport reindeer for geological and other expeditions. Besides, they had additional income from meat. Now reindeer are rented only for the transportation of tourists. But this branch of the tourist business is just emerging in Russia.

These are some reasons for the shortening of the taiga type of reindeer husbandry in Siberia during the last decades. This type of reindeer herding has completely disappeared in the European North. That's why the taiga zone is also called the zone of disappearing reindeer husbandry.

## Trends in number of domesticated reindeer

The number of domesticated reindeer in Russia has been changing significantly within the last 100 years in the range of from 1.2 million (2001) to almost 2.5 million (1969). The main reasons for these changes have been of social and economic character.

The first accurate registration of the reindeer population in Russia was carried out in 1926-1927, the total was 2.195.000 reindeer, and all belonged to private owners. Reindeer husbandry had three main purposes: the use of animals for transport, subsistence economy and meat production.

In the 1930's the transformation of reindeer herds into public ownership was a very painful process for Northern indigenous peoples, especially at the initial stage. The size of private herds was strictly limited.

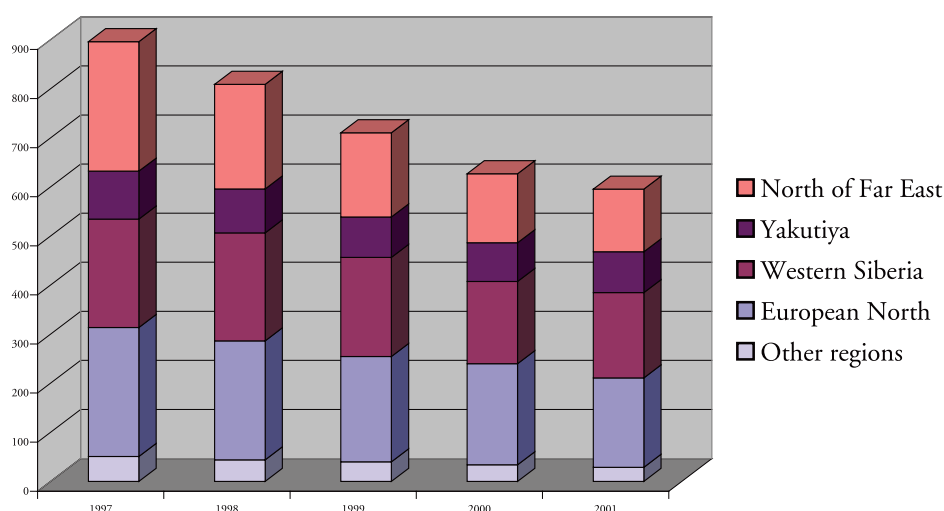
As a result, the total number of domesticated reindeer in Russia decreased by 1934 to the minimum level of 1.434.700.

Then the total number of reindeer increased steadily, though slowly and unstably at first. In the 1960's and 1970's, the number of domesticated reindeer was by far over 2 million (Figure 1) and in the period 1968-1972 it was at the maximum (over 2.400.000). At that time the percentage of private-owned reindeer was at the lowest (11-13%).

The indigenous peoples of the North were still passively opposed to public reindeer husbandry, but through a generation gradually got accustomed to it. It played an important role that the Soviet government paid great attention to the public reindeer husbandry and allocated large sums of money for developing it. Various zootechnic and veterinary procedures were carried out on a wide scale. In particular, considerable work was done in overcoming reindeer diseases, like anthrax, scabies, brucellosis, necrobacillosis. Great attention was paid to the scientific support of reindeer husbandry. In Norilsk, Yakutsk, Magadan and Naryn-Mar special institutes and a network of research stations were set up to service the agriculture of the North, and reindeer husbandry occupied a prominent place among the agricultural projects. New technical means were taken into use in reindeer husbandry, like special caterpillar vehicles, airplanes and helicopters, radio communication and electric power supply.

Unfortunately, the same period was characterized by purposeful struggle against the nomadic way of life of reindeer herders and Northern peoples in general.

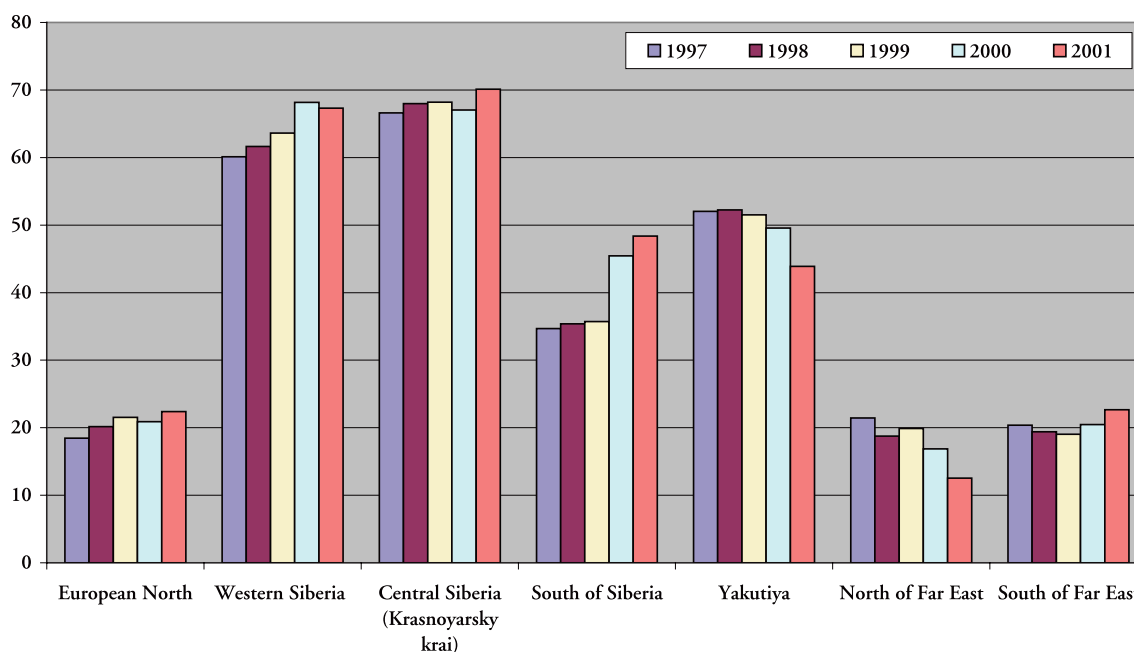
Figure 2: Dynamics of the Number of Domesticated Reindeer in Enterprises, in Thousand



This resulted in quite negative consequences. The system of a traditional wildlife management and of a traditional way of life of the reindeer herding peoples was partly disrupted. During the compulsory elimination of nomadism (which used to be the reindeer herders' normal way of life in the Russian North) the aboriginal family life was deteriorated. It was quite unnatural when in case of the so-called shift system of herding, herders' families were divided: the men were in the herds, while the women and children were in specially built settlements.

Together with the development of large-herd reindeer husbandry on the tundra, forest-tundra, and mountain taiga areas, the 1970's and 1980's were characterized by the recession of the transport reindeer husbandry of the Khanty, Mansi, Evenk, Even, Selkup and some other peoples in the taiga. By 1989 the taiga reindeer husbandry was reduced at least twice, down to the level of 100-150.000 reindeer (in the 1970's there were 300.000 reindeer). Although the forage capacity of the taiga reindeer pasture allows successfully pasturing of at least 1-1.5 million domesticated reindeer.

Figure 3. Rate of Reindeer in Households, %



The reasons were especially of economic character: the development of power-driven transport, especially the appearance of snowscooters dramatically reduced the resident populations need for transport reindeer.

In the 1990's, when the formation of market economy and democratization of the society began, the situation in reindeer husbandry changed dramatically. That resulted in a significant reduction in the population size of domesticated reindeer, decline and decay of collective reindeer husbandry of the kolkhoz' and sovkhoz' type (Figure 2), and partial return to

private ownership of reindeer herds. Private-owned domesticated reindeer constitute now (01.01.2002) almost 50% of the total number (Figure 3).

Number of reindeer commonly tends to shorten. The last year (01.01.2002) it was only 1.196.000 domesticated reindeer, i. e. 48 % from their maximum number - 2.467.000 in 1969.

In the largest region - the Northe-East the number of reindeer has been reduced by three times. In several regions there are practically no reindeer left.

Figure 4: Dynamics of Number of Domesticated Reindeer in North-Western Regions, in Thousand

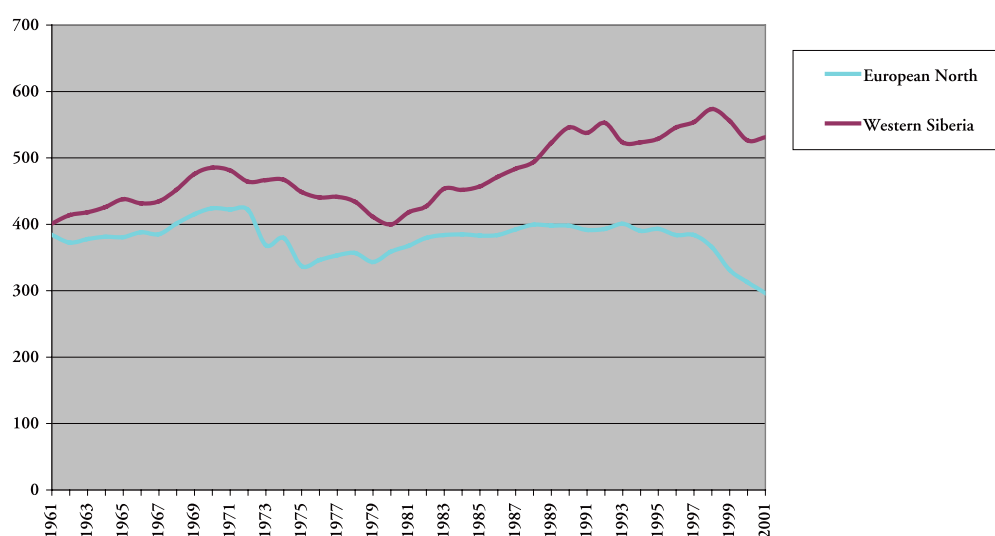
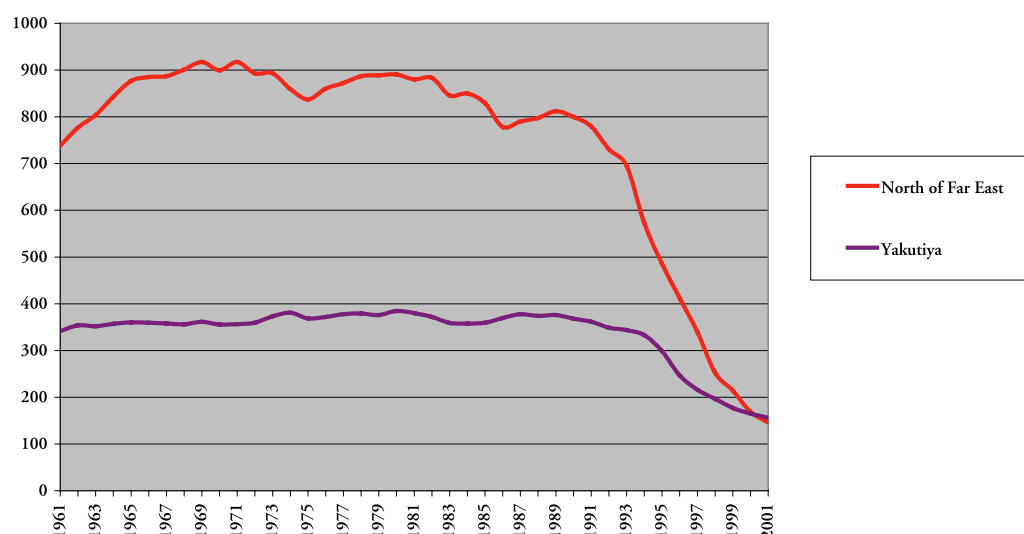


Figure 5: Dynamics of Number of Domesticated Reindeer in North-Eastern Regions, in Thousand





## Modern situation in main reindeer husbandry regions

As noticed before, all reindeer herding regions in Russia can be divided into three zones according to their geographical, ethnic and economic characteristics. They differ in terms of modernization tendency to change and perspectives on the future development.

### *The North-West Zone (Figure 4)*

The zone includes the tundra and forest-tundra from the western borders of the RF to the Yenisei. It is the territory of Saami's, Nenets' and Komi-izhems' reindeer herding within the limits of the Murmansk and Arkhangelsk Oblasts, the Komi Republic, the Yamal-Nenets and western part of Taimyr AO. Although this region has been under intensive oil and gas exploitation, the reindeer husbandry here is comparatively stable. The number of reindeer on the main part of this territory is constant or shortens little during the last decade (see Figure 2). In two districts (Yamal, and Taz) it has gradually grown. The economic conditions for further development of reindeer husbandry in the northwestern Russia are comparatively favorable. Particularly it is connected with a high level of industrial development in the region, where there is intensive oil and gas exploitation (Yamal-Nenets and Nenets AO). The Yamal-Nenets AO is now the largest region

of reindeer husbandry. Almost a half of all Russian domesticated reindeer are concentrated here. The main factors that prevent it from developing further are storage, processing and realization of reindeer meat; there is also a lack of pastures in many places.

### *The North-East Zone (Figure 5)*

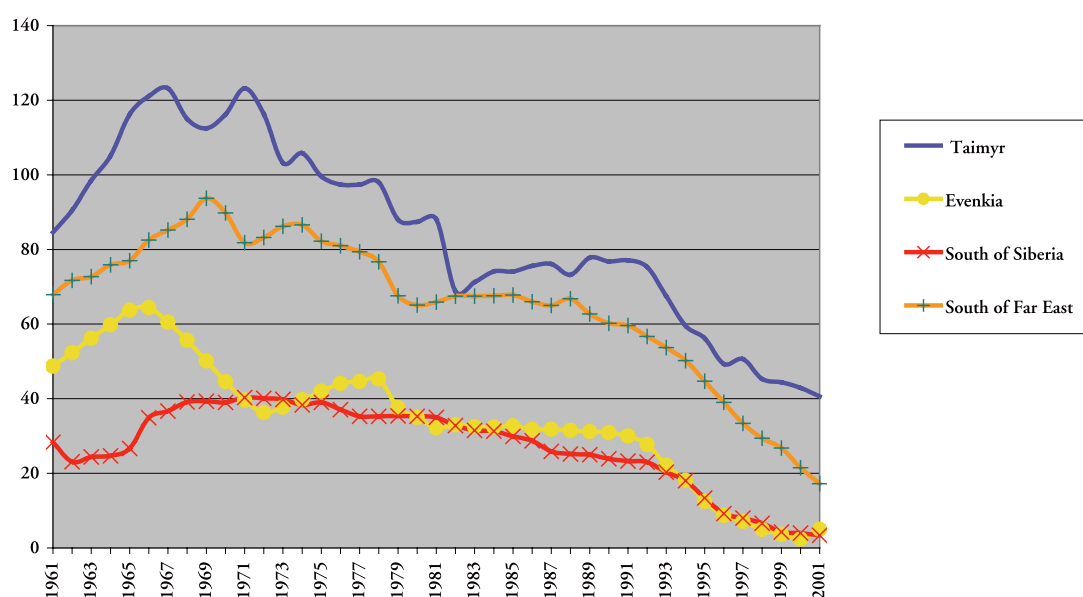
The zone includes territories of tundra, forest-tundra, and northern mountainous taiga in the east from Yenisei (Yakutia, Chukotka and Koriak AO, Kamchatka, and Magadan oblasts).

Reindeer husbandry here is the occupation of Evens, Chukchi, and Koriaks. It is an area of rapid recession in number of reindeer and as a consequence impoverishment of indigenous population connected with reindeer husbandry. To stabilize the situation stable and to stop the shortening in number of reindeer, financial support for reindeer enterprises and herders' families from regional budgets takes place. But there are no obvious results. The perspectives of the branch are uncertain. Reindeer husbandry here seems to develop only with other branches of the traditional economy (hunting on wild reindeer, fur animals, sea mammals, fishing) as parts of a common economic unit.

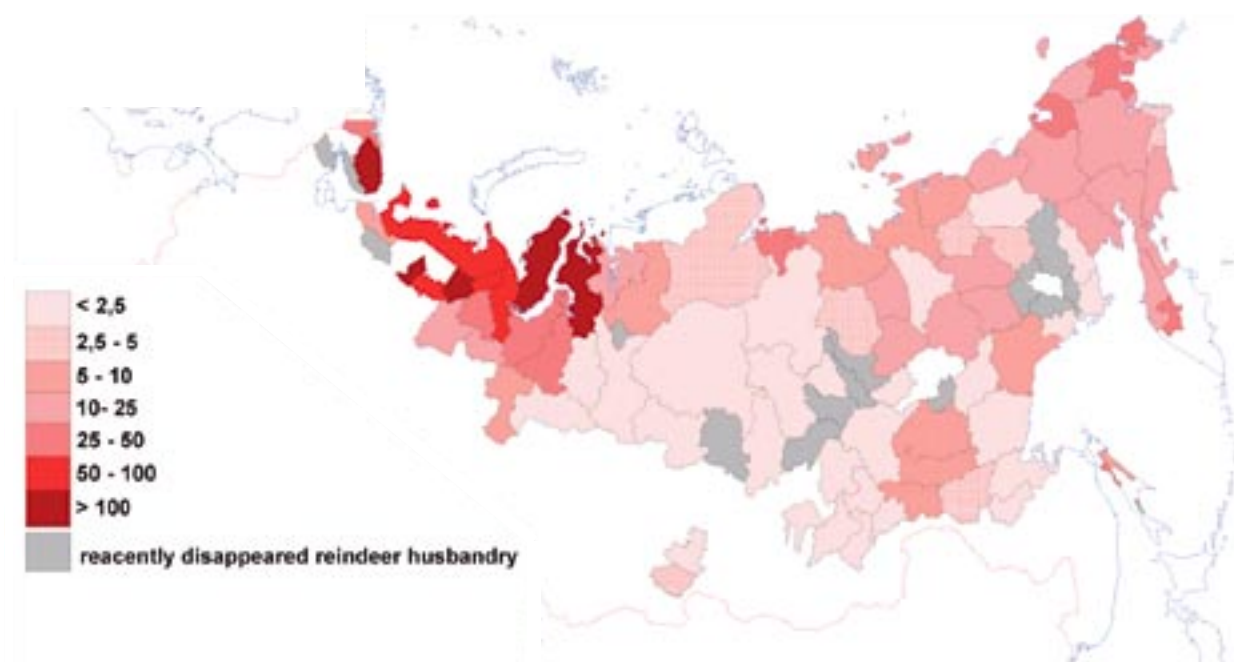
### *The Siberian Taiga Zone (Figure 6)*

The zone includes all reindeer herding regions of the Siberian taiga (Evenkia, Buriatia, Tyva, Irkutsk,

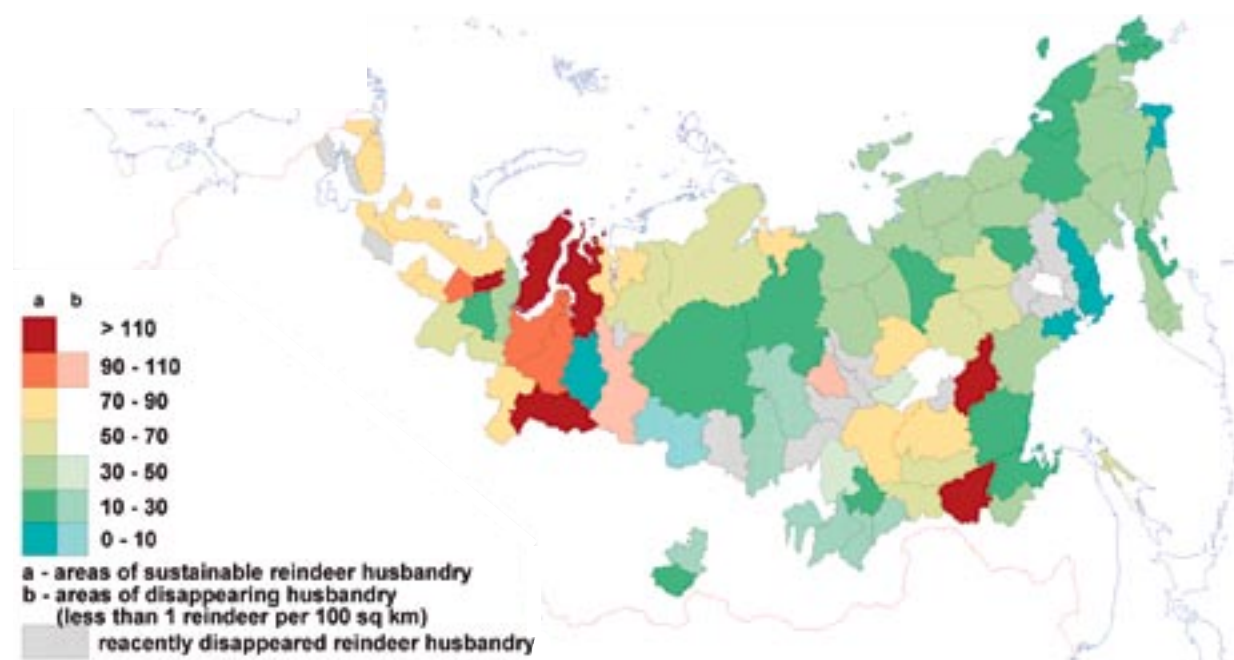
Figure 6: Dynamics of Number of Domesticated Reindeer in Southern Regions and Taimyr,



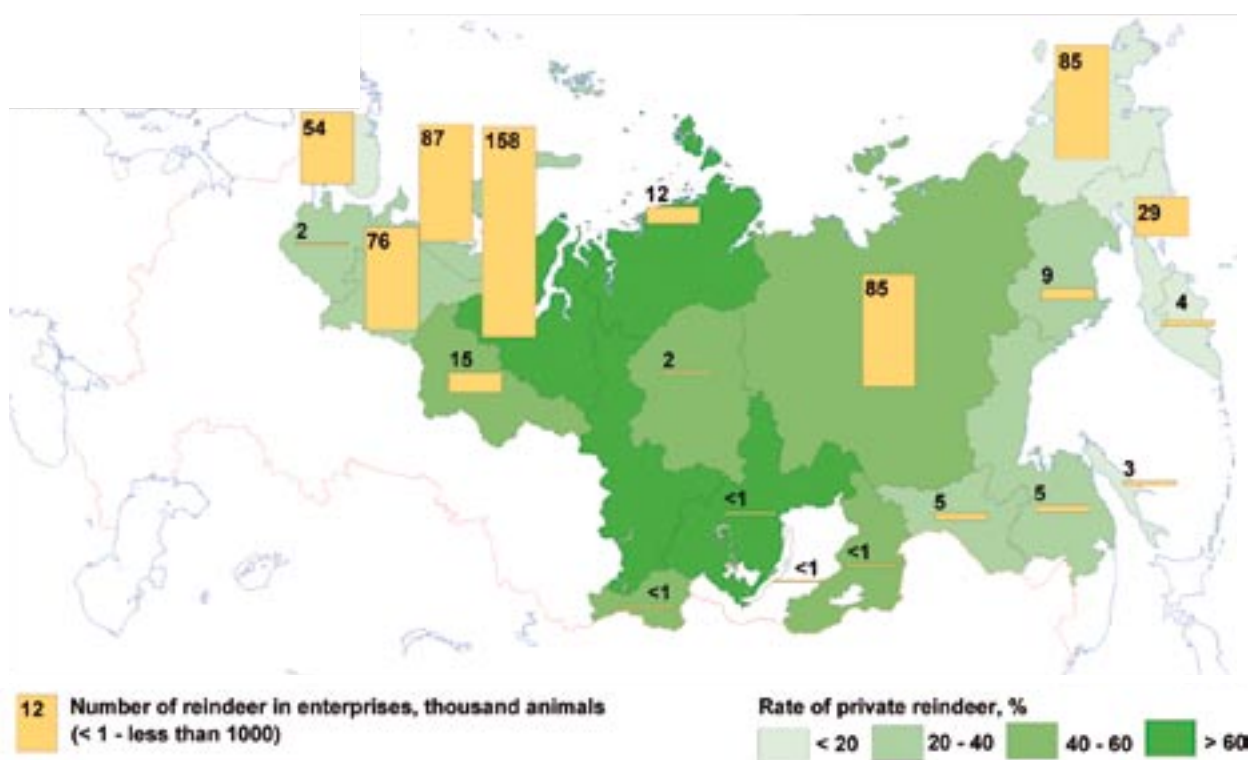
Map 3: Number of Domesticated Reindeer per 100 sq km



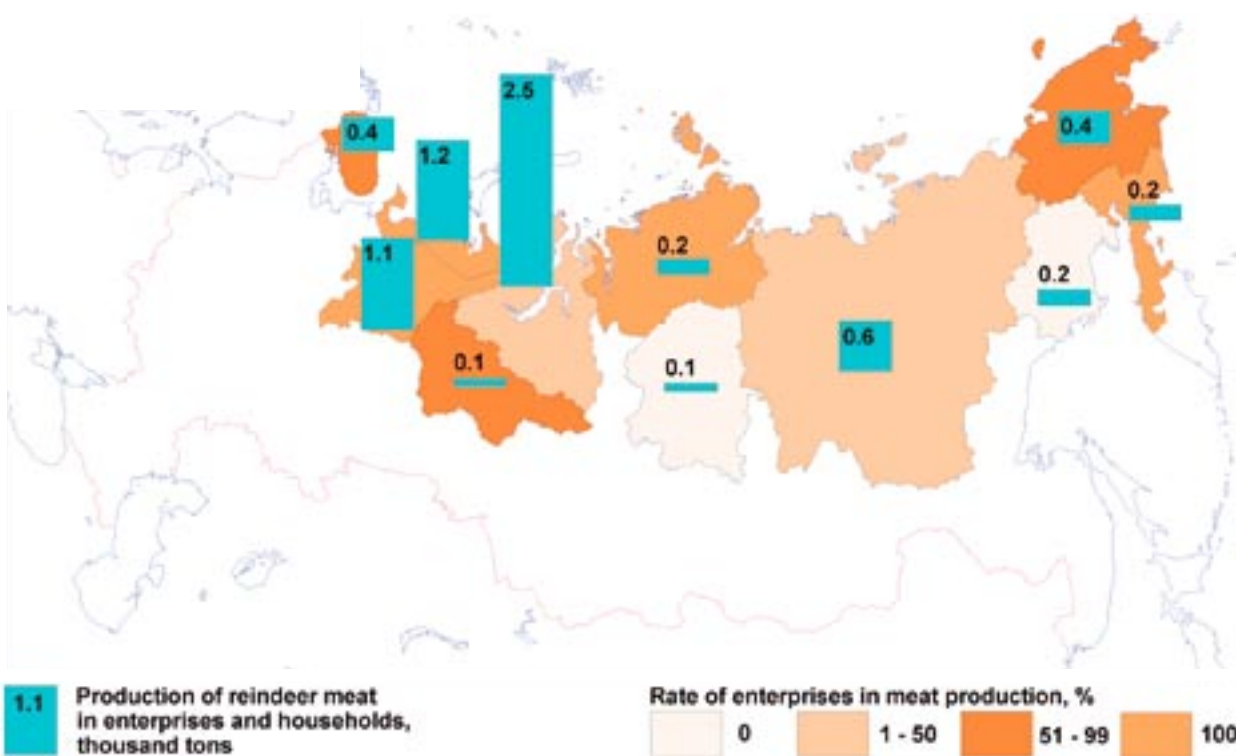
Map 4: Trends in Domesticated Reindeer Number, 1999/1990, %



Map 5: Rate of Private Reindeer and Number of Reindeer in Enterprises, 01/01 2002



Map 6: Production of Reindeer Meat, 2001



Chita, Amur, and Sakhalin oblasts, Krasnoyarsk and Khabarovsk krai) except territories in the northern mountainous taiga. Many indigenous peoples are engaged in reindeer herding here. The taiga in the Western Siberia (Khanty-Mansi AO) can also be included in the list, but this territory is different when it comes to conditions for reindeer herding and reindeer husbandry here is more stable. In the European part of the country (Karelia, forest regions of the Komi) the taiga reindeer herding has disappeared. Now, it is rapidly receding throughout the large territory of the Siberian taiga. The area used for herding is not continuous, it is divided into separate isolated lots with a few hundred reindeer on each. But even they are becoming smaller and more separated. In many taiga districts, where reindeer husbandry used to be common, there are no reindeer at all. The Tofalar reindeer (Irkutsk oblast') are nearly extinct; these reindeer used to be the strongest and largest transport reindeer on earth. In some regions the number of reindeer has grown during last decade. But this situation is connected with the impoverishment of the population. Earlier they used snow-scooters for hunting but now price on petrol is too high and they have to go back to the traditional reindeer transport.

Under the modern conditions the reindeer husbandry in the taiga can expect to be supported and preserved mainly as a part of the culture of the indigenous peoples. These traditions are rich and various, but are practically out of use under the modern economic conditions in Russia.

As to economy (except the use of transport reindeer for hunting), the future perspectives can be connected with the creation of cultural and recreational centres (reindeer used for tourism) and with breeding reindeer within fences.

## National Management of Reindeer Husbandry

### Forms of ownership of reindeer and pastures

There are three forms of ownership of reindeer in Russia today: public ownership, state ownership and private ownership, which in turn, divides into farmers' and personal ownership (Figure 7).

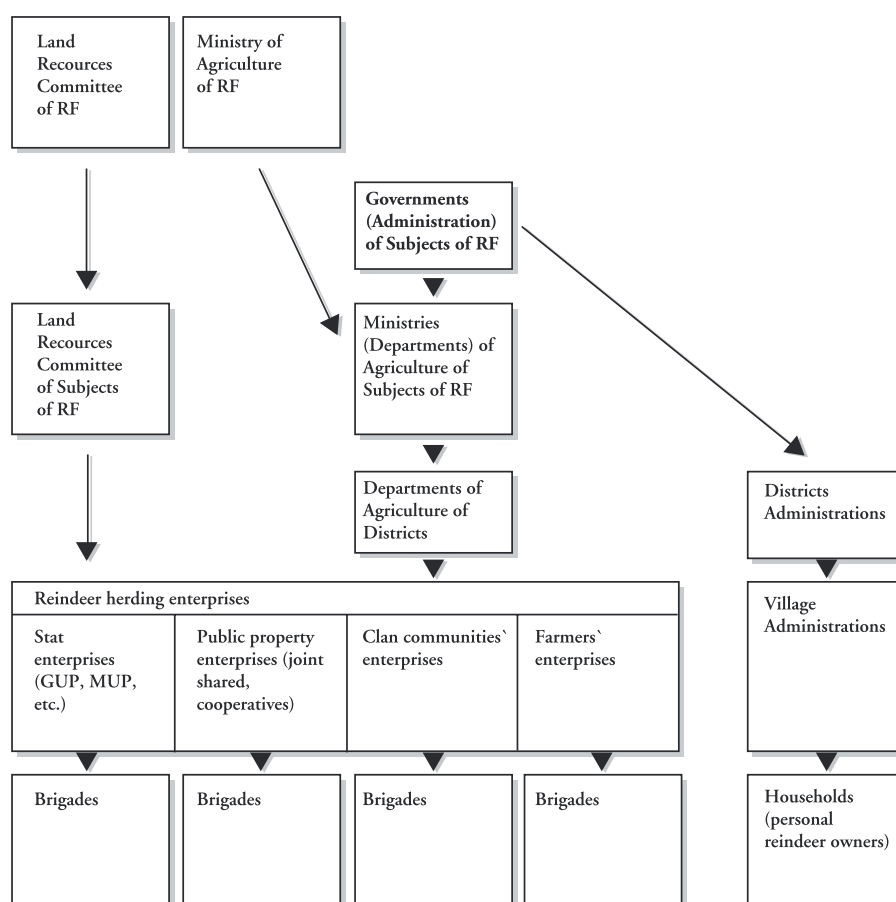


Evenks from Sovietskie Lakes in Turukhansk District, Russia

Photo © Konstantin Klovov



Figure 7: Management System of Reindeer Husbandry in Russia



There are more than 1.100 agricultural enterprises with different forms of ownership functioning now in the North. Most of them are connected to reindeer husbandry. Various forms of enterprises are created in the North, as well as all over the Russia (Materials of the Ministry of Agriculture of the RF ..., 2001).

State ownership is preserved in experimental-producing enterprises, belonging to agricultural research stations of the Russian Agricultural Academy, as well as in the number of enterprises, which were transformed after privatization into unitary ones of municipal or regional subordination (MUP or GUP).

In state enterprises the reindeer herders are not the owners, but wage laborers, who can at best have some personal reindeer in the herd.

Public property includes most reindeer, which were earlier owned by collective and state farms. As a result of privatization joint shared enterprises and agricultural producer's co-operatives and sometimes clan communities have been created on the base of

reindeer herding kolkhozes and sovkhoses. Public property is most common. In practice the difference between state and public forms of property are insignificant for the reindeer herders. They have a small number of shares, which have no influence on the results of voting at stockholders meetings. The directors of the public enterprises are often appointed by administrative organs, and not elected.

Private ownership appears in personal reindeer owning, as well as in new forms, like owning of reindeer by farmers' enterprises, clan communities, unions and other private associations. Personal reindeer usually belong to concrete herders working for the reindeer enterprise (or to one of his relatives). Those reindeer are herded within the herds of the enterprise, where the owners work. However, it is now possible for private owners to run their independent economy.

The question concerning the form of ownership in clan communities is complicated. Principally, the commune assumes an association of reindeer, belong-

ing to concrete owners, i.e. private property. However, in the statistics reindeer stock of large communes is usually regarded as public ownership. Moreover, the definition of the state of the clan communities' reindeer to a great extent depends on the local legislation (see text in box).

Pastures of the enterprises, which are created on the base of sovkhozes and kolkhozes, are in their perpetual tenure, but belong to the state. Withdrawal of those lands is possible only by a general meeting resolution or a decision of the board of directors of the enterprise. As a rule, appointed lands are assigned to clan communities, co-operatives, joint-stock companies and farmers' enterprises on the base of long-term rent (sometimes general tenancy) with succession. The usual term is 25-50 years.

Personal reindeer owners (householders) have the most complicated situation in terms of the use of land. They herd their reindeer on the pasturing territories of public and state enterprises, sometimes within the herds of the main land user, sometimes by separate herds. In the case of surplus of reindeer on the terri-

tory the administrative organs, first of all, try to reduce the personal reindeer stock.

There are restrictions on the number of personal reindeer for workers and pensioners in enterprises in some regions, such as Nenets AO, Murmansk Oblast and other regions. A similar resolution is about to be passed in the Yamalo-Nenets AO, where the stock of personal reindeer is the largest in Russia. In a number of regions leaders of state and public enterprises collect payment from personal reindeer owners for herding reindeer on the pastures of these enterprises.

In the statistic material, published by the Ministry of Agriculture of the RF, only three forms of ownership of reindeer are marked: public and state enterprise ownership (together), farmers' ownership and personal property of the population (i.e. households). It is interesting that during the 1990's, despite a considerable reduction in the reindeer stock in most regions, an increase in the percentage of personal and farmers' ownership, i.e. in private property, took place in many districts (see Figure 3).



Evenks from Sovietskie Lakes in Turukhansk District, Russia

Photo © Konstantin Klovov

## The Federal Level of Reindeer Husbandry Management

Reindeer husbandry as a specific branch of agriculture requires a particularized approach to its management. It is impossible to achieve the desired effect of the state management if the reindeer husbandry is approached as a part of cattle breeding, without taking its characteristics into consideration.

At present, the management of the reindeer husbandry as a specific branch of agriculture, on the federal level is carried out by the Ministry of Agriculture of the RF through the Department of Regional Co-ordination (see Figure 7).

The federal state reindeer husbandry management was most effective during the period 1961-1991. It was based on the principles of state protectionism. In that period there was a State Department of the North within the Ministry of Agriculture of the RF. Within its structure there were several departments: on planned-economical and bookkeeping works, on material support and capital construction, on zoovet-

erinarian measures, on technological processing of production, on personnel training.

Unfortunately, the special management structures with a number of high-quality specialists were eradicated in 1991, when the process of transformation of state property to different owners has begun. Today in the Ministry of Agriculture of the RF only 6 persons in the Department of Regional Co-ordination are partly engaged in the management of reindeer husbandry, that is, obviously, not enough. At the same time the state support of the branch was sharply reduced.

The Ministry of Agriculture of the RF together with the Reindeer Herders Union of Russia (RHUR) take a number of measures to enlarge the support of the branch. On their initiative the government regulation "On Additional Measures of State Support of Reindeer Husbandry in 2000-2005" has been passed. But the activity of the Ministry on the support of the northern agricultural industries faces a key problem – lack of budget financing. Thus, the law "On Federal Budget for 2001" has called off lax credits, compensations for 30% of forage costs and Development



Evenks from Sovietskie Lakes in Turukhansk District, Russia

Photo © Konstantin Klovov





Evenks from Sovietskie Lakes in Turukhansk District, Russia  
Photo © Konstantin Klovov



Budgets, which were appointed as measures of additional support of the northern reindeer husbandry. The Ministry of Agriculture of the RF considers, that to improve the situation in reindeer husbandry it is necessary promptly to pass a special federal law "On Reindeer Husbandry".

The Ministry of Agriculture is not the only state organ managing reindeer husbandry issues. These questions form a considerable part of the common Federal purpose program "Economic and Social Development of Indigenous Peoples of the North until 2011".

The main executors of the Programme has been the Ministry on Federation Issues, National and Migration Politics of the the RF (in autumn of 2001 this Ministry was dismissed), other interested federal organs of executive power, executive authorities of subjects of the RF and local government, associations of indigenous peoples, the Reindeer Herder Union of Russia and other organizations.

The main aims of the program are:

- to support reindeer husbandry and other traditional activities and handicrafts of indigenous population;
- to develop processing of their production;

- to create trading stations to increase trade and barter with indigenous communities;
- to improve local energy supply;
- to develop market infrastructure, social infrastructure, system of health protection and human services. Intellectual and national culture development and perfection of educational system in the Far North are also included in the Program.

## Regional level of Reindeer Husbandry Management

On the regional level the reindeer management is executed by the Departments of Agriculture of regional Administrations, in the republics by Ministries of Agriculture. In the regions with districts or other administrative division there are additional management units, such as Departments of Agriculture in Administrations of the districts. Regional and district administrations have a staff of specialists in reindeer husbandry, veterinarian service and, ideally, financial and legal consultants. Unfortunately, in most of the regions agricultural administrations are understaffed with specialists on reindeer husbandry.

*A characteristic of the organisation of small clan communities in southern Yakutia is the private ownership of reindeer among the members of community, that are kept in the common herd. Each reindeer has the label of its owner. However, it may be used for transport purposes also by other members of the community. The reindeer of each owner are considered as his share in the common clan community ownership. At the same time, in official documents for the Statistic Board all these reindeer are considered the property of the clan community. It gives the herders a possibility to receive state support. Thus, small clan communities in southern Yakutia operate as co-operative societies. Their members do not receive wages from the incomes of the communities (by the exception of state grants). Quite often members of clan communities simultaneously are workers of the sovkhoses or other state enterprise. As workers of the sovkhose they may be included into reindeer herders brigades. They may keep reindeer of the sovkhose and reindeer of the clan community in one common herd. This situation became possible because the small clan communities were formed under the initiative of the Association of Indigenous Peoples of the North even before the reorganisation of the sovkhoses. As an opposite, in northern Yakutia the clan communities were mostly created from the state farms, and in many cases it was only "the changes of a signboard". This is the reason, why small clan communities in southern Yakutia, which have been organised like co-operative societies are more viable and more active than larger communities, organised like sovkhoses.*

Administrations draw up instructions and recommendations, long-term plans of development of reindeer husbandry, coordinate activity of reindeer enterprises, settle questions on distribution of budget means (local and federal), etc. They usually hold annual conferences of the leaders of the reindeer enterprises for working out strategies for the development of the branch, experience exchanging and dealing and other issues.

The other important items of the reindeer management in regions are Committees of Land-use and Land Resources which are responsible for the use of reindeer pastures (see Figure 7). They set the lines of land tenures and, moreover, until recently they were responsible for the organization of pastural territories within reindeer enterprises. This concerned, first of all, large enterprises, with several reindeer herds. Their territories have been divided into brigade pasture lots, which in turn have been divided into seasonal plots according to forage capacity of the pastures. All pastures have been mapped and their carrying capacity have been calculated on the base of special botanical aerial surveys.

The structure, described above, is an ideal for the state management of the reindeer enterprises on the regional level. However, it is not convenient for the management of private reindeer husbandry under modern conditions.

For example, in the Yamal-Nenets Autonomous Okrug the Department of Agriculture is responsible for the reindeer husbandry management for the Administration of the Okrug. The State Committee of Land-Use and Land Resources is responsible for the use of reindeer pastures. Both the Department and the Committee deal directly (without mediation of the Districts' Administrations) with managers of public and state enterprises but they do not deal with owners of private reindeer. This means that only 12 large enterprises (erlier sovkhoses) with 153.000 reindeer (33 % of the total number of reindeer) are under the operative control of the Yamal-Nenets Autonomous Okrug Administration. The lack of means to control private reindeer husbandry became a major problem for the Yamal-Nenets Autonomous Okrug Administration. This has resulted in some hostility towards the private herders and conflicts between them and large enterprises.

The above-mentioned structure of regional management is mainly characteristic for the regions of the tundra type of reindeer husbandry. In the taiga zone, where reindeer herding has an auxiliary function, it is

often of little interests for the agricultural administrations. In this case the committees or departments for indigenous peoples' issues take up reindeer management. Unfortunately, as the experience shows, an unprofessional approach has resulted in the loss of administrative control on reindeer husbandry in these cases.

In some regions, for example in the Sakha (Yakutia) Republic, the management system of reindeer husbandry has specific features. There are two basic types of enterprises owning reindeer in this Republic: the clan communities and the state enterprises. The clan communities are the main successors to the broken up sovkhoses. However, until now many reindeer enterprises have kept the state form of ownership: "state unitary enterprises" and "municipal unitary enterprises".

Nearly all the state enterprises are under the jurisdiction of the Ministry of Agriculture of the Sakha (Yakutia) Republic. But, in contrast to the Departments of Agriculture in Administrations of other regions in the Russian North (for example the Yamal-Nenets AO), the Ministry of Agriculture of the Sakha Republic does not work directly with enterprises. According to the concept of management of reindeer husbandry (as well as other branches of agriculture in the Sakha Republic), the Ministry only creates conditions for economic development, but does not participate in the decisions making. The administrative task of the Ministry is to develop state mechanisms that support and stimulate the reindeer husbandry. Enterprises are not subordinate to the Ministry and the Ministry has not divisions in uluses (districts in the Sakha Republic), i.e. the administrative vertical structure is absent. Although the Ministry communicates with enterprises only through the administrations of the uluses, the departments of agriculture in the administrations of the uluses are not subordinated to the Ministry.

However, this variety in management of reindeer husbandry in different regions does not exclude, but rather confirms the proposal on improvement of regional reindeer husbandry management, prepared by Dr. Syrovatsky (2000), concerning working out universal standards of organizational and zooveterinarian measures for the enterprises with different types of ownership and the same type of reindeer husbandry. These standards should provide for and regulate: methods of formation of herds and brigades, material support, order of use of pastures, terms and methods of veterinarian works and zootechnical

actions, herding and guarding organization, standards for storing, transporting, processing and realization of production.

## The Local Level: Management of Reindeer Enterprises

In a historical perspective the traditional use of resource of the northern peoples was an economic activity of small permanent or temporary labour collectives (20-100 persons) mostly for own consumption, but using the surplus for barter and sale (Pika, Prokhorov, 1994).

Now, the main form of such collectives is the reindeer herding brigade. Each enterprise has as many brigades as reindeer herds. The brigade completes the whole annual work cycle connected to one herd. It has a lot of pasture land, buildings, hardware and other inventory assigned to the brigade by the enterprise.

Very often the brigades consist of close relatives or embraces several related families. Usually zooveterinarian specialists, mechanics and representatives of the administration of the enterprise come to the brigade several times a year according to a management plan and a plan of zooveterinarian works.

Some specialization and division of labour is common within the brigade, while easy co-operation is kept in general. At the present time it is possible to mark the following herders' specialties: accounting clerk, mechanic, radio operator, veterinarian. The division of labour takes place in herding as well as in seasonal displacement and moving to the next pasture lots. It takes into consideration the physical condition and experience of concrete herders.

Besides, there is an inter-brigade specialization within an enterprise. In large enterprises there are specialized brigades to keep different types of herds: meat productive, breeding, soft antlers, fattening, etc. (Podkorytov, 1995; Syrovatsky, 2000, etc.). Sometimes a special brigade can be formed to drive the reindeer herd to other district for sale.

Concerning the administration, the brigade includes herders, one of which is a leader with common duties of the herder – brigadier, and chum-workers (women), who get wages for taking care of common needs (cooking, repairing cloths, storing firewood, maintaining the chum, etc.). The leader of the enterprise together with the brigadier forms a brigade for working with a common herd. It is very important to have the necessary staff in the brigade; this lightens

the work with the animals. The leading body of the enterprise defines the operating schedule, but usually the brigadier corrects it, starting from the needs of the brigade. The brigadier appoints chief herders, based upon experiences and special skills of the brigade members. They are responsible for the execution of duty functions and concrete organization-economic works. Young members of the brigade usually work as herder's learners. In the pre-reformations period the number of chum-workers in the enterprise was usually based on the norm of one worker per 2-3 reindeer herders. This resulted in the fact, that there were several women per one position of chum-worker, when several families were herding common herds (hidden unemployment). At the present time the common enterprises can determine the status of women in the brigade independently, as well as their payment.

The management control of the work of the reindeer herding brigades in the enterprise is executed from the head of the enterprise to the brigadiers of the reindeer herding brigades through senior specialists (chief zootechnician and veterinarian), radio dispatchers and specialists, assigned to the brigades. The functional management is executed mainly by senior specialists through (sometimes by-passing) a radio dispatcher and assigned specialists. This approach enables the brigade to coordinate the organization-economic plans with a head and specialists of the enterprise, assigned to the brigade, while at the same time acting as an independent unit.

The leader (director, chairman of the board) of present-day reindeer enterprises manages its activity on the base of undivided authority according to a working plan for the current calendar year, approved in the enterprise and coordinated with a head of the local Administration. A basic point in the work of the leader of the reindeer enterprise is a presence of stable communication with subordinated brigades, neighboring enterprises, other land-users and higher organizations. This allows making necessary resolutions in the case of emergency situations, and coordinating them with the other interested organizations. The undivided authority of the leader in the sphere of management control is limited by the board of the enterprise, which joint resolution sets the terms and order of zootechnical, organizational and veterinarian actions, prepares proposals for structural changes of the enterprise, directions for development, etc.

In the collective property enterprises a general meeting of owners (stockholders, shareholders) is a very important management element. Key ques-

*In different regions the number of herders in one brigade can vary from 4 to 10 men, and the average number of herders in brigade is 8 persons. As a rule the number of herders does not depend on the number of reindeer in the herd. The question about the number of herders, necessary for herding one herd, has always been debatable. Most of the agricultural managers approach this problem from the common positions in cattle breeding: more animals – more herders. Usually the duty standards have been set to 200-300 animals per reindeer herder, and hence the number of reindeer herders for a herd is set. However, such an approach can not be accepted as correct (Syrovatsky, 2000). In reality the amount of work of the herders' brigade is the same, regardless of the number of animals in the herd. One herder's duty lasts for 12 hours and from 1 to 3 men should constantly stay with the herd depending on weather, season and type of pasture. Thus, only herding requires about 14,500 work-hours. Except for these duties, the herders should carry out a number of other jobs. These works differ a little bit, depending on the size of the herd, but in general they require about 4 thousand work-hours a year. Thus, the total amount of working time of one reindeer-herding brigade is about 17,000 work-hours. According to the Labour Code of the Russian Federation, the amount of working time for one person should not be more than 1876 hours a year. Thus a reindeer herders' brigade should include 9 reindeer herders ( $16873:1876 \approx$  approximately 9).*



Nenets from the Enysei River in Western Part of Taimyr Autonomuos Okrug, Russia

Photo © Konstantin Klovov



**S**upport of reindeer husbandry in Sakha and Chukotka  
*In the Sakha Republic the state support embraces all enterprises, but not individual owners. Nominally if someone becomes owner of private enterprise (farm) possessing reindeer and register as a legal person he will also receive the state support.*

*Funds to support reindeer husbandry are allocated form a special item in the Republic budget and transferred to the Finance Departments in the Administrations of the Uluses. To receive money the head of a reindeer enterprise (director of state or municipal unitary enterprise, head of clan community farm, chairman of co-operative, etc.) should present the data on the number of reindeer and calves to Statistics and to Agriculture Departments of the ulus Administration, which transfer the information to the Ministry of Agriculture of the Sakha Republic. On the basis of these data, the Finance Department of the ulus Administration transfers funds to the account of the enterprise.*

*According to clause 13 of the Laws of the Sakha Republic "On the State Budget of Sakha (Yakutia) Republic for 2001" and the special Order of Government of the Sakha Republic (2001) funds of 53,140,000 roubles (about 1,700,000 USD) were allocated for payment of guaranteed wages to reindeer herders and 10,000,000 roubles (about 300,000 USD) – as grants for born and survived calves. Besides the direct grants, financing support of reindeer husbandry has been included in several other budget items: protection of reindeer pastures, shooting of wolves, development of the basic agricultural enterprises (section "reindeer enterprises"), insurance of agricultural funds (section "reindeer"), aerial surveying of the number of wild reindeer, and reimbursement of hunting licenses for wild reindeer and sable to local people (mostly to reindeer herders).*

*In the Chukotka Autonomous Okrug, where the reduction of the reindeer stock has been especially sharp, according to the Decision of the Governor (2000), all herders (men) received grants of 500 roubles per month and "chum-workers" (women) - of 1000 roubles per month during all the time they worked on the tundra. But it has not produced any positive effects.*

*To improve the situation the new Governor of Chukotka in 2001 introduced new grants at the rate of 550 roubles per reindeer a year. Now the herders receive in average 4,000-5,000 roubles (about 150 USD) every month . Thus, the level of income of the herders has been multiply nearly by ten due to the support from regional budget. Hopefully this should produce positive changes in the reindeer economy of the Chukotka in the nearest future.*

tions of financial politics of the enterprise and main directions of its activity, elections of the head and the board, recruiting of specialists, approval of administration report for the last economic year are in the competence of the general meeting. Unfortunately, in most of the post-socialist enterprises workers-owners do not quite understand the role and importance of this superior managerial body of the enterprise.

## Forms of state and regional support of the reindeer husbandry

The reindeer enterprises are situated in the North of Russia, at a considerable distance from the main markets and industrial centres, producing material and technical resources. In addition, the communications in the Far North are underdeveloped and transport is much more expensive than in other regions. These

conditions are the base reasons for the state support of the northern agricultural enterprises, that is determined by the Law “On the Basis of Governmental Regulations of Social-economic Development of the North of the Russian Federation” (1996) and governmental decrees “On Additional Measures of State Support of Reindeer Husbandry in 2000-2005” and “On the Federal Purpose Program «Economic and Social Development of Indigenous Peoples of the North until 2011»”.

Today, the main type of state support, that is received by reindeer enterprises, is direct grants for all kinds of meat and other agricultural products. This grant is paid from regional budgets to all meat producers (including reindeer enterprises and, in a number of regions, also private reindeer owners). The regions' administrations annually fix the rates of subsidy for 1 kg of meat production. The biggest subsidies have been paid in Chukotka, Yamal-Nenets, and Khanty-Mansi Autonomous Okrugs.

Besides, since 2000 special financial means from the federal budget are assigned for the direct support of reindeer husbandry. In 2001 the reindeer

enterprises received federal support at the rate of 110 roubles per reindeer.

In some regions the local budgets also appropriate special direct grants to reindeer enterprises. For example, in the Tyva Republic grants at the rate of 450 roubles per reindeer is provided in addition to 110 roubles of the federal grant. In several regions the administrations give special grants to enterprises lacking reindeer and private reindeer owners for purchase of live reindeer.

A few regions have more developed mechanism of reindeer husbandry support (see text in box).

In all northern regions, besides the direct grants, recovering of the transport costs should become a very important element of the state support. The transport component in the prime price of the reindeer husbandry production amounts to 60 %. The Ministry of Agriculture of Russia has proposed to assign 322 million roubles as transport compensations for agricultural enterprises of the Far North from additional budget sources. Such compensations are already made now in a number of regions. For example, in the Nenets AO 80 % of the transport costs for delivery of



Nenets from the Enysei River in Western Part of Taimyr Autonomous Okrug, Russia

Photo © Konstantin Klovov

production of reindeer enterprises to Narjan-Mar are recovered.

It should also be noted, that the state granting of the social sphere of the reindeer husbandry seems very important now.

## State capital investments in reindeer husbandry

During the last four years due to a default in 1998 a sharp decrease in the capital investments into the agriculture in the North and the reindeer husbandry in particular, took place. During three years no slaughter houses were built (Materials of the Ministry of Agriculture of RF to Parliament hearings, 2001).

In the present situation, the reindeer husbandry can not in practice obtain commercial credits. That is why it is very important to assign state means for the development of capital for construction in reindeer husbandry. Now, the main capital investments into the branch are specified by the Federal purpose program "Economic and Social Development of Indigenous Peoples of the North until 2010".

Besides, regional authorities create their own programs of reindeer husbandry development. They aim to get reindeer enterprises profitable, to develop domestic markets, to start new technologies and to produce new kinds of products from reindeer. Usually such programs propose to use not only regional budget means, but, first of all, to obtain long-term credits from exterior organizations and off-budget funds.

## The Reindeer Herders Union of Russia

The Reindeer Herders Union of Russia (RHUR) was established in 1995 according to the federal law "On non-commercial organizations". It includes more than 220 physical and juridical persons from all reindeer regions of the Russian North. Units of reindeer associations from the republics of Komi, Sakha (Yakutia), Tyva, Chukotka, Yamal-Nenets, Khanty-Mansi, Nenets, Evenks A.O., social-political organizations – Association of Indigenous Small-number Peoples of the Russian North, Siberia and Far West, foundations of support for indigenous peoples of the Russian North and their traditional activity are also members of the RHUR.

The leading organ of the RHUR according to its Regulations is the Congress of Reindeer Herders of Russia; between Congresses – the Government and the Executive Direction of the Union. There is also a Scientific-coordinating Council. The RHUR does not have any constant financing resources except small membership fees for office expenses. This fact prevents the Union from working more efficiently.

The Executive Direction works with the Government of the RF, the Parliament of the RF, the Russian Academy of Sciences and the Russian Academy of Agricultural Sciences, and other institutions. There is visible development in the cooperation between the RHUR and the regional northern administrations, their departments of agriculture and with the NGOs of the indigenous peoples of the North.

The Reindeer Herders Union of Russia is a member of the association of World Reindeer Herders. Business relations between the RHUR's Government and Direction and the associations and organizations of reindeer herders from Norway, Finland, Sweden, and Canada usually solve practical tasks. For example, educational institutions of Russia and Finland have concluded the agreements on education and training of reindeer herders and specialists in reindeer breeding, and to work out co-educational programs, hold yearly educating seminars in Kautokeino (Norway), Inary (Finland), Murmansk and Moscow (Russia). The next seminar will take place in Khanty-Mansiysk (Russia).

Together with the Institute of the Problems of Small-numbered Indigenous Peoples of the Russian North (Russian Ac. Sci, Siberian Dep.) and the "Rosniizemproect" the RHUR has made an alternative variant of an important governmental project – the state program of "Stabilization and Future Development of Reindeer Husbandry up to 2010". It has principally different aim. It suggests that the means of federal budget should be spent not only on creating productive objects, but also on recreating the number of reindeer and provide what is necessary to help the reindeer herder recreate dispersed households, prepare new reindeer breeding personnel and preserve the traditional way of life. This is a real opportunity to face the crisis in Russian reindeer husbandry. It is expedient to create enterprises for reindeer slaughtering and reindeer meat processing in the districts where the reindeer stock is not strongly reducing.

The reworking program was supported by the organizations of the indigenous peoples of the North-

ern regions and became a basic methodical manual for the working out and supporting programs of reindeer husbandry development and is carried out now by the administrations of all major reindeer regions in Russia.

The RHUR also proposed to work out a “Scheme of Land-use in the Regions of the Far North” to direct reindeer pastures and hunting territories which was carried out by the “Rosniizemproect” in 2000-2001.

The Russian Federation is the only Arctic State that has not regulated the relationships with indigenous peoples in the sphere of natural resources use and nature protection. So the second Congress of RHUR asked the president of the RF V. V. Putin to support the working out of the law acts package on the problems of the northern indigenous peoples.

The Reindeer Herders Union of Russia looks forward to international support of governmental and non-governmental organizations, such as the Arctic Council, the Northern Forum, and the Barents-Region. The Russian North is in a crisis. It needs not only financial support, but also to gain experience of stable reindeer husbandry that takes place in the Scandinavian countries.

## Economy of Reindeer Husbandry

### Main types of reindeer enterprises

There are two main types of reindeer enterprises in Russia: one has reindeer husbandry as a main activity, in the other reindeer husbandry has an auxiliary function. The first one is situated mainly on the tundra, and the second mainly in the taiga.

#### *Enterprises where reindeer husbandry is a main activity*

The reindeer husbandry production is a basic activity for most of the joint enterprises, clan communities, close corporations, co-operatives and private enterprises on the pasture areas on the tundra, the forest-tundra and, partly, in the mountainous-taiga. All those enterprises appeared from former kolkhozes and sovkhozes, which were created in the territories of northern peoples in 1930's-1950's.

It is typical for those enterprises that the number of reindeer tends to a maximum from the point of

view of the pastures' carrying capacity or the number of workers. Usually reindeer are divided into several herds. A group of workers takes care of each herd. Single reindeer herds are characterized by a comparatively constant sex-age structure, which reflects the main direction of activity of the enterprise or specialization of the concrete herd. Nowadays the main directions could be meat production or soft antlers production. Furthermore, the following products could be included in the list of main products of the enterprises: reindeer skins for overall tailoring and chum covers, skins for chamois, dried or conserved blood, and endocrine glands used for medication.

#### *Enterprises where reindeer herding has auxiliary importance*

In the Siberian taiga there are many enterprises, where reindeer herding acted as an auxiliary service (foremost as transport). They are state, or public, or personal businesses of hunters and fishermen in the taiga reindeer herding area. In general, many scientists notice a principal difference between large herds tundra reindeer husbandry, which could be compared with meat productive cattle-breeding, and small herd reindeer husbandry in the taiga, which is directed towards intensification of the other types of traditional economical activities. The reindeer transportation was quite important until the middle of the 1970's. Then the introduction of mechanical transport means to the northern regions began, and the number of transport reindeer in unspecialized enterprises started to reduce.

At the present the tendency is a small increase in number of reindeer in a number of unspecialized enterprises. This is, first of all, due to high costs of mechanical transport means and complications in the service of private enterprises and communes. Besides, many programs for development of traditional branches in the taiga zone intended to provide additional incomes for communes and private farmers' enterprises from reindeer herds owing to soft antlers and fermentative raw materials.

The situation in the Sakha (Yakutia) Republic illustrates how differently the reindeer enterprises could develop under conditions of economic crises.

The reindeer husbandry in northern and southern Yakutia have changed in different directions. Before the reforms reindeer-herding sovkhozes in northern Yakutia were big enterprises specialised mainly on meat production. They received significant state support and were well-provided with technical facili-



ties. All reindeer herder brigades were equipped with caterpillar cross-country vehicles, snowscooters, radio transmitters, rifles, etc. Helicopters constantly served them. Tractors transported them firewood when they migrate on the tundra. In a number of sovkhoses fattening of reindeer before slaughtering, using mixed fodder, mineral and salt was carried out. Great attention was paid on the breeding work and veterinarian services. All these activities stopped or were sharply reduced after the reforms. As a result the efficiency of production fell dramatically. Herders lost interest in their work, losses of reindeer increased and income of enterprises reduced to zero (by the exception of state grants). All reindeer enterprises of northern Yakutia were also involved in fishing and hunting. Under the present conditions reindeer husbandry became the most unprofitable among these three branches of economy. Because of that, a significant part of the herders concentrated on fishing and hunting which gave more income and more food. This is particularly important for the regions where there are a lot of wild

reindeer, i.e. for the most part of the area of reindeer husbandry in the North of Yakutia.

Under the Soviet period reindeer husbandry in the South of Yakutia was not as well developed as in the northern part. Reindeer were used mostly as riding animals. Now, reindeer husbandry in southern Yakutia carries out two very important functions for indigenous population. First, it provides owners of reindeer with transport during the winter hunting for sable. The sell of sable skins provide the basic money income. Most hunters of the indigenous population (Evenks and partially Yakuts) hunt sable with guns (traps are used only when the hunter watches the sable if it has hidden in a refuge). This method of hunting requires mobility, it is not possible without riding reindeer. Due to reindeer transport Evenks hunt in mountainous landscapes and escape the competition with Russian hunters, who occupy valleys of rivers, where they can use traps and snowscooters. In the 1980's Evenks also sometimes used snowscooters, but now they can not afford it, because the prices on engi-



Turf Storage, Piasina River, Central Taimyr, Russia

Photo © Konstantin Klovov

### **R**eformations of reindeer herding sovkhoses in Chukotka

*The experience from the reorganization of reindeer husbandry sovkhoses in Chukotka is illustrating for the whole eastern part of the Russian North. The reorganization started in 1991 according to the Decree of the President of the Russian Federation "On the reformation of agroindustrial complex of the Russian Federation" and was carried out in three ways. Several sovkhoses of the Okrug were completely divided into private farms (farmers' enterprises). These farms were put in equal economic conditions with other commercial and trade enterprises with all consequences following from it: excessive tax burdens, absence of privileges at purchase of material and financial resources, etc. Both farm managers (who were mostly former employers of the sovkhoses administration) and reindeer herders lacked theoretical and practical skills on the organization of the work in private farms. In several cases people have taken advantage of the situation and property of the farms has been sold out. Some inexperienced chiefs, wishing to reduce charges of the brigades on the tundra, have transported all old people and women into the settlements. Young herders without the advices and the authority of seniors and help of women, could not thoroughly organize the pasturing of their herds. The reindeer herding brigade is an independent productive unit living on the tundra. After being reformed into a private farm it is unable to be engaged simultaneously in production, processing, storage and realization. Especially it lacks the capacity to settle the matters of material and technical supply. All these activities would be possible only if farms were incorporated in an association or cooperative society. However creations of such associations takes a lot of time. As a result almost all farms have lost their reindeer during the first years of their work. In other sovkhoses only part of the brigades was transformed into independent private farms, i.e. their reorganization was not complete. For example, all farms created on the basis of the sovkhos "Konchalansky" were united again into one common enterprise after a few years. This has given positive results and reindeer husbandry there has survived.*

*In several enterprises the opposite strategy "of healthy conservatism" was accepted. Here, according to the Decree of the President, only the formal change of the pattern of ownership was carried out (from the state enterprise into joint-stock company), but the industrial structure is left intact. The structure of brigades was not changed, old skilled herders and women ("shum-workers") continued to work on the tundra. Under the new conditions the administration of the sovkhos has managed to keep intact the most important part of the industrial infrastructure. In spite of economic difficulties and price differences, the brigades of herders are supplied with foodstuffs and equipment whenever possible, and veterinary and zootechnic works are carried out in the herds. Three tundra provision bases continue to supply reindeer herder brigades the hole year around.*

neering and fuel are too high. Thus, the presence of transport reindeer has become for them the necessary condition to make a money income, although reindeer husbandry itself does not yield any profits. This kind of economy requires co-operation in work and stimulates the formation of clan communities. One of the members of the clan community keeps the herd, while others are hunting sable.

The second function of reindeer husbandry in the south is to provide families of reindeer owners (herders and hunters) with reindeer meat. Wild reindeer,

Siberian deer, elk and musk-deer can also be sources of meat. However, the opportunity for good hunting is not present everywhere. In opposite to the northern areas of Yakutia, fish resources in the south are also limited. Thus, actually the necessity to slaughter a lot of reindeer for meat does not allow herders to increase their herds. As a rule, the communities of herders in southern Yakutia are created from several related families. A distinctive feature of the life of the herders we met during fieldwork is the division of most of the families. Practically all year round the men live in the

taiga with the reindeer herds. They arrive in the village very seldom - once or twice during the year for a short period of time. Their wives, children and other relatives live in a village and are engaged in different works. Often they plant kitchen gardens and keep cattle, pig, and goat. Part of the villagers come to the taiga only for the hunting season. It is interesting to note, that formally heads of many clan communities are the wives of reindeer herders, who live in villages and conduct all documentation, while their husbands keep reindeer herds in the taiga.

### The Present state of reindeer enterprises

In most of the so-called agricultural enterprises in the North of the Russian Federation reindeer husbandry is the main kind of economic activity, but not the only

one. Except for reindeer herding, also hunting, fishing, fur farming, sea hunting, gathering of wiiveld plants, breeding of cattle, horses, and pigs, and sometimes plant cultivation are also included into the sphere of activity of a number of enterprises. Most of them were unprofitable (without taking State subsidies into account) already since the 1970's. During the pre-reformation years the enterprises got a profit mainly out of reindeer husbandry.

By the beginning of the economic reforms the agricultural enterprises in the North fell into deep economic crisis. In general, great disparity between the prices of agricultural production and industrial one, remoteness of the centres of material-technical resources' production, increased prices of transportation, and a sharp decline in the rate of State support have caused an considerable recession of production during the 1990's.

Nganasans from the Piasina River in Central Taimyr, Russia

Photo © Konstantin Klovov



Figure 8: Levels of Intensity of Reindeer Husbandry (by Syrovatsky, 2000)

Induses	Levels of intensity		
	Low intencity	Middle intensity	High intensity
Femal ratio in the whole stock, %	50%	55%	60%
Calf crop per 100 January females	55	65	80
Survival of adult reindeer ,%	85	90	98
Average meat production for 1 year, kg per 1 reindeer	5,0	9,2	15,6
Average production of soft antlers for a year, kg per 1000 reindeer	60	92	125

Figure 9: Slaughter of Domesticated Reindeer in Enterprises, Metric Ton of Live Weight

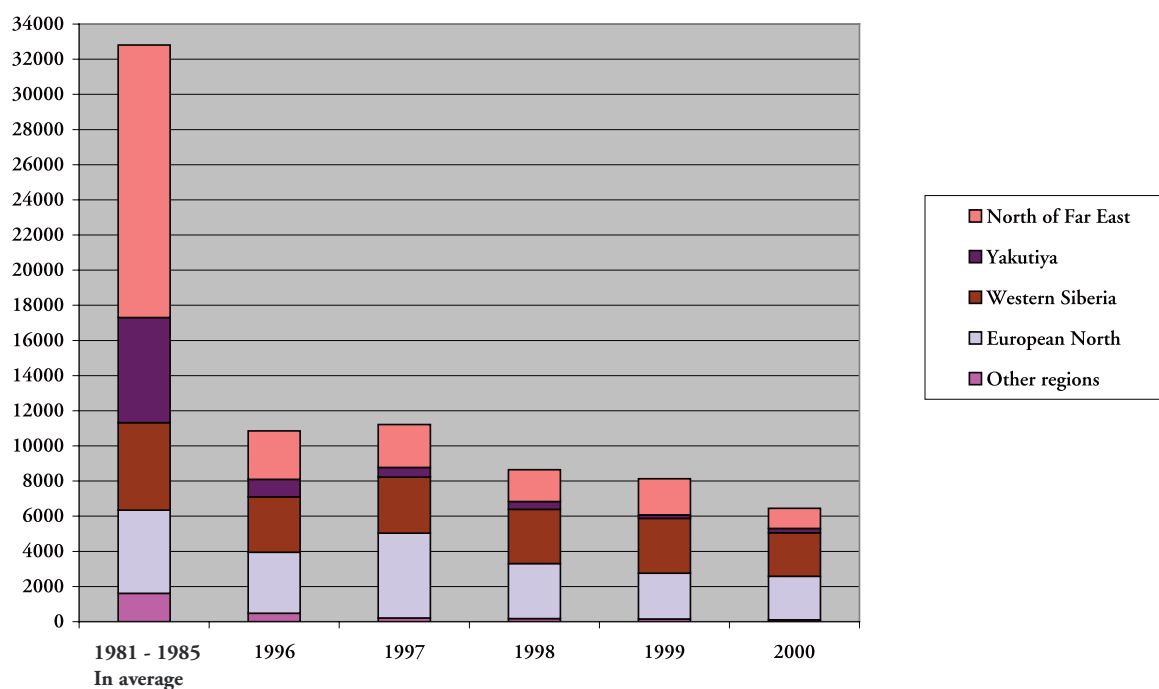
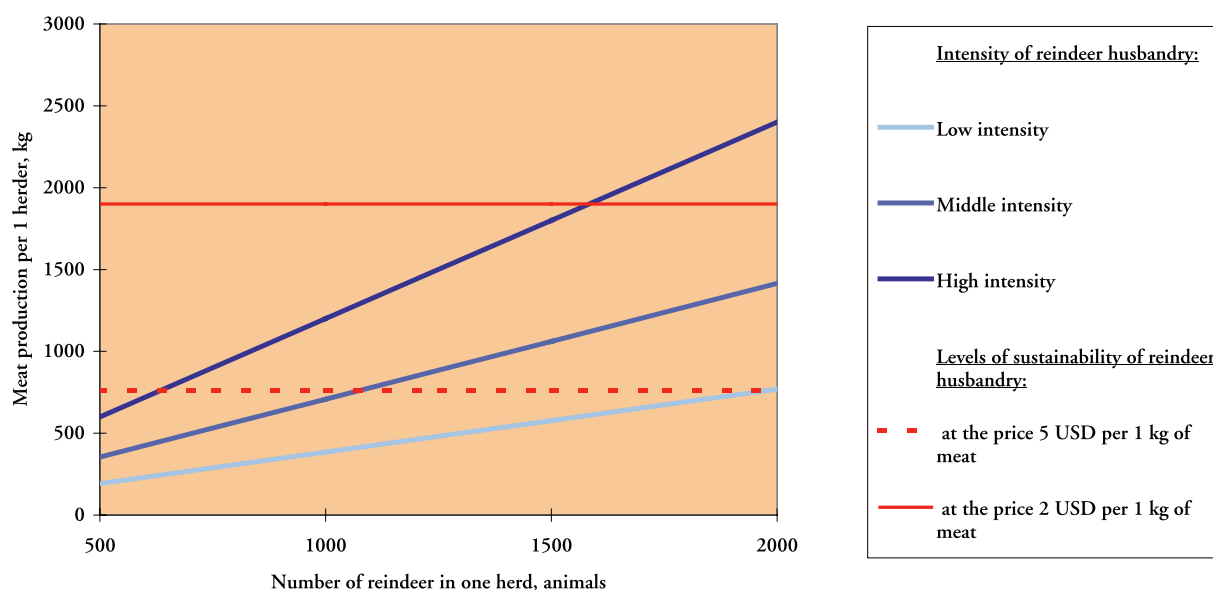




Figure 10: Levels of Sustainability of Reindeer Husbandry



The rates of recession \of agricultural production in the northern regions were higher than in Russia as a whole (Materials of Ministry of Agriculture, 2001). The cattle and poultry livestock has been reduced 3-5 times, meat and milk production – 5 times, area under crop – 2 times. By 2001 the reindeer stock has been reduced about twice. This situation results in a continuous reduction of capital assets of the reindeer enterprises and causes many problems in management.

The reformations of northern sovkhoses and kolkhoses have not improved the situation (see boxed text).

### Economic effectiveness and sustainability of reindeer husbandry

Although the economic state of nearly all reindeer enterprises is far from well-being, the reindeer husbandry in many regions of the Russian North, especially in the European North and Yamal, can still be the main profitable branch of production.

The value of income from reindeer husbandry is dependent upon several factors and conditions.

As it has been noted, the method of close herding of reindeer is most common in Russia, the herd is under round-the-clock control by a herders' brigade. In such a mode of herding the amount of work done

by a brigade varies only slightly with the number of reindeer in the herd. The average, is about 17.000 hours of work a year (Syrovatskyi, 2000). According to the Russian labour regulations, 9 herders are sufficient to do this amount of work. Also, at least 4 women (chum-workers) are needed for permanent service under the nomadic living conditions. Therefore, the total number of full-time jobs in a brigade is 13. In reality, it is with fewer workers in a brigade common, as they perform just the same amount of work by working more hours daily.

Depending on environmental conditions, a 13 member brigade can manage a herd of 500 reindeer in the taiga zone or 2.000 and even more in the tundra. It is obvious that a brigade with 2.000 reindeer, i.e. almost 154 reindeer per worker, could attain much better results and larger incomes than a brigade with 500 reindeer (about 38 reindeer per worker). That is why economic opportunities for the tundra reindeer husbandry are much more favourable than for the taiga reindeer husbandry.

Economic efficiency of reindeer husbandry can be measured:

- by annual quantities of meat and other products obtained from reindeer herd;
- by proceeds of the sale of meat and other products obtained from a given herd.

The annual quantities of meat and other products obtained by a brigade from their herd will depend on both the environment (including pasture and range condition, weather, predators, wild reindeer and so on) and intensity of husbandry (i.e. herders' skill, experience and material/technical supply, etc.).

The following quality indexes are generally used in Russia for assessing the outcome of the reindeer husbandry :

- survival of adult reindeer each year (%);
- calf crop per 100 January females, that is the number of living calves divided by the number of females at the beginning of the current year;
- specific female ratio in the whole stock (%).

These indexes are used to calculate annual quantities of meat and other products that could be obtained from a certain herd. In Table 8 an example of such calculations is given for three levels of reindeer husbandry .

The table shows that the yield of the same reindeer stock can differ three and even more times depending on intensity of husbandry. For example, a herd with 60% females, a 98% survival of adult reindeer, and a calf crop of 80 per 100 January females gives about 15 kg of meat per one reindeer a year and a herd with the respective indexes 48%, 85% and 55 gives only 5 kg.

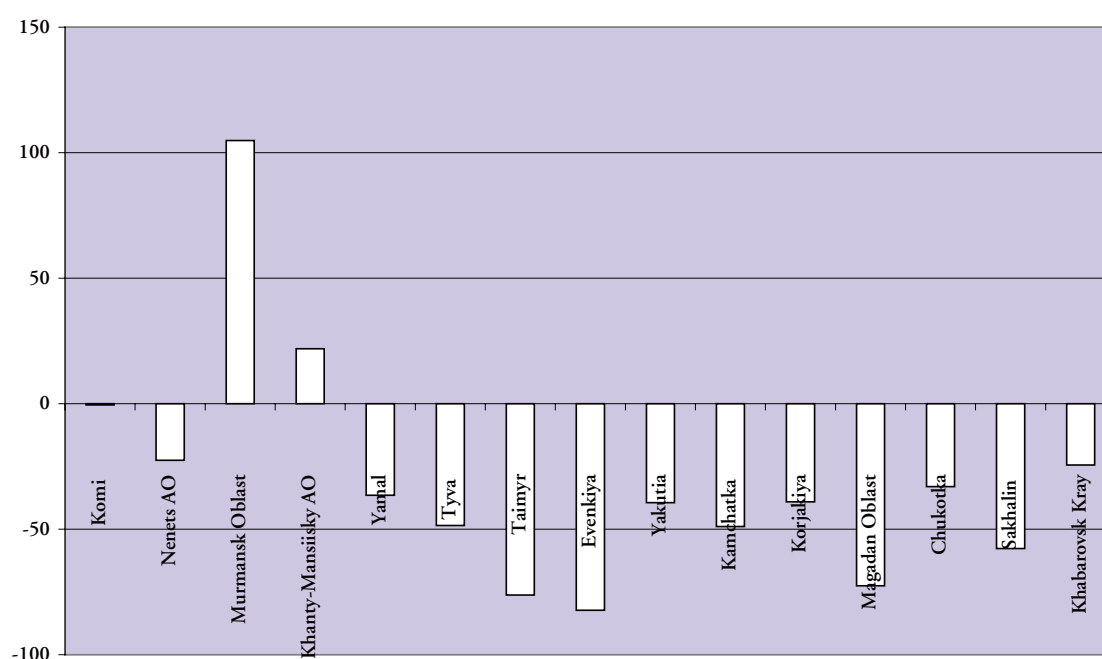
During the last decade the intensity of reindeer herding in all reindeer enterprises of Russia fell dramatically. Even in enterprises of the Yamal-Nenets AO, where the situation of reindeer husbandry was the best, the calf crop per 100 females reduced from 85-88 in the 1980's to 46-59 in 1998-2000. In Chukotka in 2001 the survival of adult reindeer was only 77.5% (in the 1970-1980's – 89%); the calf crop (in respective years) – 52 and 67. As a result, besides a decrease in number of domesticated reindeer, the yield from the same reindeer stock was reduced to a great extent. This has caused a reduction in reindeer meat production in Russia from 25.000 tons in 1990 to 7.400 tons in 2001 (Figure 9).

The income is dependent on the purchase price of meat. In the last few years, reindeer meat was sold in Northern Russia by wholesale price from 1.0 to 3.5 USD a kilo. More frequently the price was about 2.0 USD (50-60 roubles).

Thus, at low husbandry intensity one reindeer will provide a profit of approximately 10 USD a year, and one herder can receive income up to 380 USD in the taiga and up to 1.540 USD on the tundra.

Usually a reindeer enterprise spends about 50% (maximum – 60%) of the total income from meat sales on salaries to the brigade members. An essential part of the proceeds is used to cover other needs of the reindeer husbandry, especially for the transport, taxes

Figure 11: Profitability of Reindeer Meat in Northern Regions, 1996, %



and investments, to cover general farming expenses, as well as the losses in other branches of production, etc.). This means that in enterprises with low intensity the herder's salary even on the tundra can not amount more than 800 USD a year, although according to a calculation made by Russian economists (Syrovatski, 2000) the subsistence minimum of a herder with his family is about 1.900 USD a year.

But if the price is risen (for example 5 USD per 1 kg, which is rather realistic) the herder's income may increase up to approximately 500 USD in the taiga and 2.000 USD on the tundra. This would be enough to get the tundra reindeer husbandry sustainable. In the taiga zone the reindeer husbandry can be sustainable only with a high level of intensity (Figure 10).

Under the current conditions most of the reindeer enterprises are already below sufficiency level. Only a few, more efficient of them manage to remain stable.

The most favorable economic situation is in the Murmansk Oblast', where it is possible to export reindeer meat at a relatively high price (Figure 11). Husbandry intensity there is, however, low, and herders' salaries are not sufficient (see text in box).

However, the profitability of the reindeer husbandry could be increased considerably by value-adding production, including, besides high quality reindeer meat, other kinds of products: viscera, deer-skins, heads, dried antlers, soft antlers, kamuses, etc. The total cost of these products is about 50% of the meat cost (Syrovatskyi, 2000) and the proceeds might be 1.5 times higher. In such a case, the reindeer husbandry is possible also in the taiga zone even at a mediate level of intensity, which is realistic now.

New technologies for obtaining medicines from reindeer blood and internal secretion glands can provide even higher profit, the value of which is dif-

**E**conomic situation in the co-operative "Tundra" (Lovozero, Murmansk Oblast', 2001)  
*The basic directions of economic activity of the co-operative "Tundra" are reindeer husbandry (reindeer meat production), production of milk, beef meat, and handicraft (mostly sewing, and making footwear of reindeer skins). The staff of the co-operative includes 340 workers. The enterprise has 25.000 reindeer and 377 cattle. It cultivates 406 ha of grass and fodder cultures to feed the cattle. There are 8 cross-country caterpillar vehicles to communicate with reindeer herders brigades. In opposite to the majority of reindeer enterprises in the Russian North, the "Tundra" receives a profit from the reindeer meat production. The production of milk, beef meat and handicraft have brought losses. Handicraft is not profitable because clothes and boots made of reindeer skins are sold basically to co-operative workers at reduced prices. It is important to note, that the profit from reindeer husbandry was received in spite of the extremely adverse weather conditions in 2000 (9.245 reindeer were lost this year).*

*The co-operative "Tundra" made such a high profit due to the possibility to sell reindeer meat to "Norfrys" at a relatively high price. The firm "Norfrys" received the certificate of the European Economic Community only last year. Now it buys reindeer meat at the price of 3.4 US dollars per kg and sells it abroad. The price on reindeer meat in the shops in the town of Lovozero (about 2.6 US dollars per kg) are now also to high, for the local market. Restaurants in Moscow and in other large cities are ready to pay for high-quality reindeer meat up to 20-25 US dollars per kg, but their needs are very restricted – not more than 10-15 kg of meat per day. It makes transportation cost to high and unprofitable. In the opinion of the president of the co-operative, the price on reindeer meat should be about 5 dollars per kg to get the husbandry stable.*

*It is interesting to compare the production of reindeer meat and beef meat by their economic efficiency. In 2000 the "Tundra" sold beef meat at a price 2.7 times lower, than the price of reindeer meat. The production cost of beef meat was twice the cost of reindeer, due to high costs of transportation by cars to places of sale. It would be the same situation with reindeer meat if it is sold on the domestic market, and not to "Norfrys".*

difficult to estimate now. But such technologies might be gainful only if a lot of reindeer could be slaughtered. Therefore, such technologies could considerably elevate profitability of large herd reindeer husbandry on the tundra, but they cannot resolve the problems of the taiga reindeer husbandry.

## Economy of reindeer herder's family

Although the main inducers of reindeer husbandry in the enterprises are reflected in state statistics and in the reports of regional departments of agriculture there are few data on the herders' family economy. Scientific research on the herders' families are very seldom. According to a calculation of Dr. Dmitry Syrovatski (2000), a herder needs an income not lower than 5.500 roubles (180 USD) per month to support his family. The nomadic reindeer husbandry is practically impossible without extra work including incidental hunting,

fishing and gathering. Together with social payments (pensions, dependency allowances, social grants, etc.) they can give not more than 20% of the total income. That means that in the zone of the tundra type of reindeer husbandry a herder should receive from his main job about 1.800-1.900 USD a year.

This is a minimum which may be considered the main economic condition of sustainability of the reindeer husbandry. At present a herder's salary (without taking into account state grants) usually is less than 600-800 USD a year, i.e. about 2-3 times lower than the level of sustainability. If average incomes are below the level of 500-600 USD a year, the indigenous population is compelled to return from reindeer husbandry to other forms of economic activity such as subsistence fishery and hunting nearby villages. Many families live already without tea, bread and sugar. In many places the conditions are so critical that all domesticated reindeer have been slaughtered and eaten.

### **R**emuneration of reindeer herders in the co-operative "Tundra" (Lovozero, Mumansk Oblast')

Due to the successful realisation of reindeer meat in 2000 the average salary of the "Tundra" workers raised by 34 % (in comparison with 1999), up to 2085 roubles per month. Earnings of the reindeer herders are a little higher than average earnings of the co-operative workers. Their salary is defined by a tariff scale. If a herder works without remarks – he receives a salary threefold the size of the tariff scale. For example, in 2000 the average salary of reindeer herders in one brigade was 3255 roubles (about 110 USD) per month and in another – 2645 roubles (about 90 USD). The average salary of the women ("tchum-worker") was 1822 roubles (about 60 USD) per month. According to established co-operative rules, there may not be more than 2 women in a brigade of 8 herders. If there are three or four, the salary of two "tchum-workers" is divided between three or four persons. The salary of the herders is calculated every month but when they are on the tundra, they can not receive, nor spend money. In April all the brigades receive products and other necessary goods (not alcohol) as advance payment. This advance payment is withdrawn from the herders' salary.

Besides salary, each herder receives from the co-operative free-of-charge clothes of reindeer skins and boots. His wife ("tchum-worker") repairs his clothes for additional payment. Each brigade of the co-operative is provided with two snowscooters, a small electric power station, and a supply of gasoline. Besides earnings from the co-operative, the reindeer herders may receive additional incomes, but they are not very important. Staying on the tundra, the herders catch fish, which contributes in their diet and partially may be brought to their families in the settlement. They don't catch fish for selling. Herders can sell their own reindeer to the co-operative, receiving up to 60-62 roubles per kg of meat. "Tchum-workers" can make and sell clothes and footwear from reindeer skins. The co-operative also pays all veterinary works carried out for personal reindeer.



The worst situation is in the North-eastern regions, where the planned economy was organized most effectively before the reforms. In these areas all domesticated reindeer were concentrated in the sovkhozes, which were large and well supplied with engineering. Many facilities were applied to make the herders' work easier, but simultaneously it lowered their adaptation. For example, the constant use of tractors and cross-country vehicles made training of transport reindeer unnecessary, the construction of fences in the taiga disaccustomed domesticated reindeer to keep by compact groups on pasturing places, etc.

In the North-Western zones salaries for reindeer herders are higher. But even in the most profitable reindeer enterprise in Russia – co-operative “Tundra” in Murmask Oblast’ – incomes of the herders are not high enough to reach the level of sustainability (see text in the box).

In the North-East of Russia, where collapsed reindeer enterprises can not pay salary to the reindeer herders brigades, the herders receive only special payments (grants) from regional budgets, in compliance with the decisions of regional Governments.

For example, in the Sakha (Yakutia) Republic financial support of reindeer husbandry from the

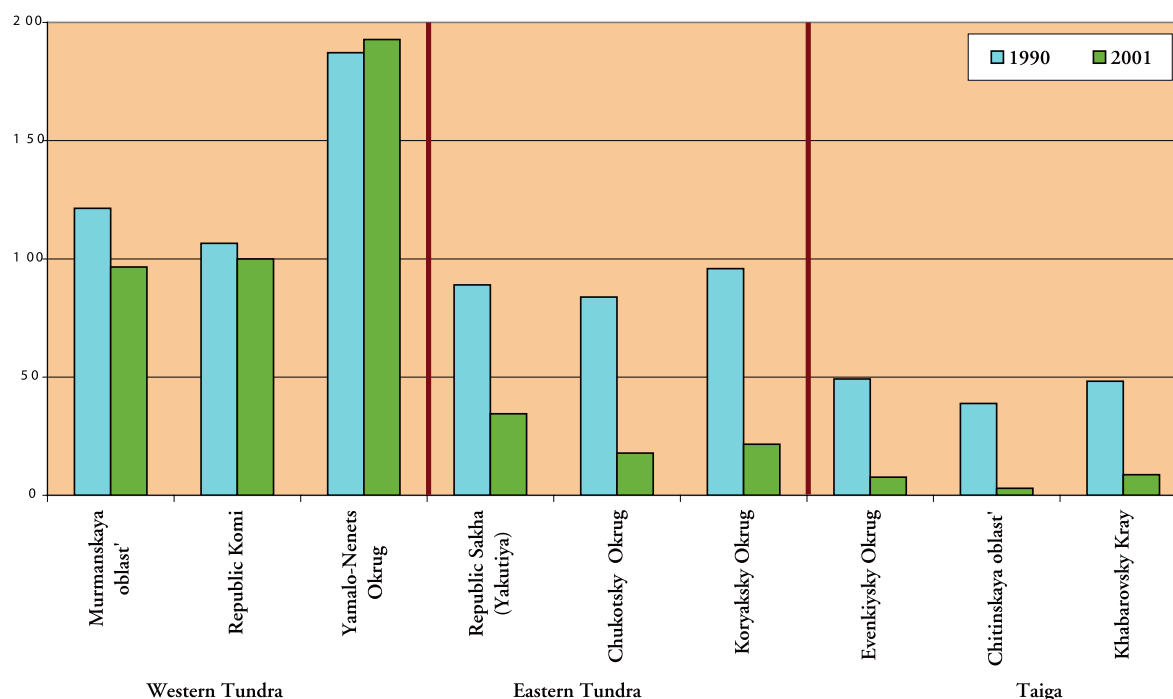
budget of the Republic has been made on the basis of the Law “On Reindeer Husbandry” (1997) and the Decision of the Government of the Sakha Republic “On payment of Work of Tchum-workers” (1998).

All forms of ownership have the right to receive this support by the exception of householders (owners of personal reindeer). The average size of the grant amounts to approximately 1 USD for each reindeer per month.

Other state grants stimulate the increase of reindeer female productiveness. Each enterprise receives about 10 USD per calf that survived until the end of the year. If the number of calves exceeded the average amount of calves in this particular uluse during last two years, the enterprise receives double payment for each additional head.

Householders, who do not work for reindeer enterprises, should have enough reindeer stock to support their families. Specialists from the Department of Agriculture of the Yamal-Nenets AO have calculated how many personal reindeer are necessary for life support of one nomadic family on the Yamal Tundra. According to this calculation a herder without family needs about 90 animals, herders with a family of 5 persons - about 385, and with a family of 8 per-

Figure 12: Trends in the Utilization of Pasture Resources in Different Zones of Reindeer Husbandry



sons - about 540. The calculation takes into account the requirements of the family for transport reindeer, meat and skin for consumption, and some reindeer for barter of basic essentials (like tea, sugar, bread, etc., with total cost about 1 USD for one person per day), but not for investment, snowscooters or the possibility to buy something for the family house in the settlement. Herders working for sovkhoses in the Yamal-Nenets AO receive a salary of about 2500 roubles (86 USD) per month.

## External Conditions

### Reindeer pastures

The total area of reindeer pasture in Russia is about 3.303.388 km<sup>2</sup> (19% of Russia). According to data from special land assessment surveys its carrying capacity is about 2.400.000 heads of domesticated

reindeer. About 20% of the pasture areas are situated in the taiga zones, only 7% of the domesticated reindeer are located.

There is 2.672.513 km<sup>2</sup> of pastures with a carrying capacity of 1.860.000 heads within the territory of large herd reindeer husbandry, including the tundra, forest-tundra zones and the mountain taiga/tundra landscapes. About 15-20% of these pastures (mostly in Taimyr, Yakutia and Chukotka) are occupied by wild reindeer.

In the rest of the pastures in 1990 there were about 1.950.000 domesticated reindeer and in many regions pastures were overgrazed. The total carrying capacity of pastures in Russia were used 94%. After the number of domesticated reindeer in Russia decreased twice, the situation has changed: only half of the pasture resources are now in use. The degree of utilization of forage resources in the three main zones of reindeer husbandry differs strongly.

In the North-Western zone the situation is tense. In the European North the forage resources are used

### *The pasture problem in Yamal-Nenets AO*

*Lack of pastures is one of the biggest challenges for reindeer husbandry in Yamal-Nenets Autonomous Okrug. All the specialists we interviewed named it as one of the three main problems. In two main districts of reindeer husbandry (Yamal and Taz Districts) there is important lack of pastures. These two tundra districts hold more than 70% of the number of reindeer, but only 35% of the grazing capacity of Yamal-Nenets Autonomous Okrug. According to data from the Okrug's Administration the actual number of reindeer in the Yamal District is 87% higher than the grazing capacity, and in Taz District - 31%.*

*The reserves of pastures in other districts, situated mostly in the forest-tundra and the northern taiga (Nadym, Pur Districts, etc.), can not be used to improve the situation in the tundra districts. To move herds from the tundra to the forest tundra is impossible due to the ethnic traditions. The routs of the Nenets are related with the adaptation of the Nenets reindeer herding to the pasturing in the northern tundra during the summer.*

*In year 2000 Yamal-Nenets Okrug produced 30.266.000 tons of oil and 521.000 millions m<sup>3</sup> of gas. During the last decades the destruction of reindeer pastures caused by the development of oil and gas extraction happened mostly in the Nadym and Pur Districts where the grazing capacity is higher than the number of reindeer. This is the reason, that despite the huge area of damaged pastures, the number of reindeer in the Yamal-Nenets Autonomous Okrug was not reduced. This fact may seem rather strange, if one doesn't take into account the concrete distribution of domestic reindeer in the different pasture areas.*

*During the next years the development of oil extraction in the Yamal peninsula becomes very probable. It will be connected with the construction of a new railway that will cross the most important grazing areas. This may lead to disastrous effects on the most important district of reindeer husbandry in the Yamal-Nenets Autonomous Okrug.*

*The lack of pastures is the background for the conflict between administration of the sovkhoses and the private reindeer herders. That was resumed in the special Decree of the Governor of the Yamal-Nenets Autonomous Okrug (2000), which introduced limits of number of reindeer for private owners. This limit gives them the possibility of surviving but prevent business opportunities to develop their reindeer husbandry further. At the same time the Decree does not practically impose any restrictions upon the sovkhose reindeer herding.*

from 75% (in the Nenets AO) to 100% (in the Komi Republic) - see Figure 12. In the European North during the last decade the intensity of resources use has slightly decreased. As an opposite, in the Yamal-Nenets AO during the last decade the extent of overgrazing augmented and a lot of pastures is overgrazed (see boxed text). In addition the pastures in the North-Western zone are exposed to escalating industrial impacts due to the development of oil and gas extraction in the Yamal-Nenets and the Nenets AO.

In the North-Eastern zone in the 1980-1990's the pastures were used up to 80-90%, but today they are only used on 20-30%. Large pasture areas are now out of use and their forage capacity is restoring. A lot of pastures, that were no longer used for reindeer husbandry, have been occupied by wild reindeer.

In the North-East the greatest defragmentations of top-soil and vegetation were connected with mining operations (especially gold, tin, and other non-ferrous metals' ore extraction) and with the use of caterpillar transport. But many gold-mining enterprises, towns, and settlements winded up during the last decade. E.g. in Chukotka in the years of intensive industrial development more than 200 settlements and other built-up areas, camps, factories, mines, pits, etc. were constructed and then liquidated. Thus, defragmentation of reindeer pastures has been reduced the latest years.

In the taiga zone the reindeer pastures were used by 30-50% in the 1980-1990's. Now, most of them are vacant and less than 10% of the forage resources are utilised. The problem of pasture conservation is an issue only in places where reindeer are pasturing in enclosures.

## Predators and poachers

According to official data from the Department of Hunting and Game, the Russian Ministry of Agriculture, there are approximately 23.000 wolves, 50.000 brown bears, 21.000 wolverines, and 6.000 lynxes in the reindeer husbandry area within the Russia. According to additional information received from zoologists these figures are underestimated at least in several big regions of Russia. For example, zoologists assume that in the Sakha Republic the number of wolves is 2-3 times higher than the official data from the Russian Ministry of Agriculture. Now, the number of predators (especially of the wolf) is noticeably higher than in the 1980's.

There is no official statistic data about the number of domesticated reindeer taken by predators all over the Russian Federation. According to data received from the regions, predators kill about 5-10% of the total reindeer livestock every year; which makes about 15-25% of the total unproductive losses of domesticated reindeer. Thus, the total number of reindeer taken by predators in Russia can be estimated to about 50-100,000 heads every year. In comparison the number of slaughtered reindeer is about 160.000-180.000. Wolves take the most. Losses from bears, wolverines and lynxes are less important. Lynxes take only a few animals during the winter, when the reindeer are pasturing in the forests.

- Before the reforms the state departments of game and hunting in all northern regions controlled the number of wolves. They had special budgets to rent helicopters for shooting wolves. Now, only in the Sakha Republic are there several special hunting brigades to fight against wolves. Besides, everybody, who kills a wolf, receives a special prize (up to about 100 USD).

The "predators problem" in the reindeer husbandry has been aggravated by the new system of control on



Food Storage, Belaya River, Central Chukotka, Russia  
Photo © Konstantin Klovov





Chukchi Woman preparing Reindeer Fur, Basin of Blaya River in Central Chukotka, Russia

Photo © Konstantin Klovov

rifled arms prescribed by the police. Usually, if herders have rifles and snowscooters, they can defend the herds from predators themselves. But now they are practically unable to receive permissions because of too complicated bureaucratic procedures. In addition they do not have enough snowscooters, fuel and cartridges. Only in the Sakha Republic the system of arm control has been simplified for reindeer herders and they can use rifles against predators without breaking the law.

Poaching is a serious problem in several regions, e.g. in the oil and gas extraction areas in Western Siberia, in the northern part of the Kola Peninsula, and others. Due to the economic crisis, the military divisions of Murmansk Oblast' received an informal sanction to shoot domesticated reindeer for meat in

case of necessity. Now, this fact makes the struggle against the poachers especially complicated. Neither herders themselves, nor reindeer enterprises have any effective means to withstand them. It is difficult to estimate the amount of reindeer shot by poachers. In official reports they are included in the total number of lost animals. Some years ago there were situations where domesticated reindeer were shot even in spite of the presence of herders.

## Wild Reindeer

Russia has always been a leading country in domesticated and wild reindeer populations. At present (in 2000) Russia has two thirds of the world's population



of domesticated reindeer (1.357.700 animals) and about 1.246.000 wild reindeer. In Russia, reindeer husbandry has always been a base for the traditional way of life of most of the indigenous peoples of the North. In the same time hunting wild reindeer also plays an important role in the life of more than 10 indigenous peoples of the North.

To maintain a sustainable reindeer husbandry, it is necessary to be aware of the interrelations between domesticated and wild reindeer. In the 20th century, the co-existence of wild and domesticated reindeer has been problematic in Russia.

Within the last decade, the population size of both wild and domesticated reindeer have undergone significant changes. The reindeer husbandry has receded significantly, while the number of wild reindeer has increased.

To analyse the problem, it has to be taken into account that domesticated reindeer cannot be considered totally "domestic" animals. It is a slightly domesticated form of the same biological species as *Rangifer tarandus*. In reindeer herding, only wild growing biological resources of pastures are used, there are no special zootechnical modes of feeding, no artificial mixed fodders created specially for reindeer, no particular modes of treatment, etc.

The wild and domesticated reindeer, as ecological antagonists, constantly contradict each other. The nature of these contradictions are discussed in a considerable amount of scientific literature, numbering over fifty books (Mikhel', 1938, Sdobnikov 1933, 1939, Druri, 1949, Geller, 1969, Syroechkovsky, 1986, Syroechkovskii 1995).

The goal in this report is oriented mostly towards an analyse the of possible negative influence of wild reindeer on domesticated ones. This negative influence, according to the general opinion, consists in the following:

- The magnitude of the danger of leading away domesticated reindeer by wild animals.
- The negative effect of wild reindeer on the pastures of domesticated reindeer and feeding competition of domesticated and wild reindeer on pastures.
- The importance of wild reindeer as carrier and transmitter of diseases to domesticated reindeer.

The firsts two are the most serious. To describe these conflicts, it is necessary to make a more detailed analysis of the relationship between domesticated and wild

reindeer (biological, ecological, ethological and other aspects).

### *Distribution and dynamics of the wild reindeer population*

The original population size of wild reindeer in northern Russia is unknown but according to approximate estimates for the 16th century, the total number of wild reindeer did not exceed 5 million. In the 1980's, the total number of both wild and domesticated reindeer never exceeded 3.400.000 (2.4 mill. domesticated and 1 mill. wild reindeer) (Syroechkovski 1986,1995).

Nowadays (1999) the total population of wild reindeer in Russia is 1.231.600. It is the maximum figure within the last 50 years, i.e. within the period when attempts were made to count the total number of wild reindeer in Russia. Within this period, the number of wild reindeer has only once approached 1 million, it was between 1985-1992 (Figure 13). It is quite possible that the present-day population has been slightly underestimated, because in the recent years the large populations of wild reindeer has tended to grow gradually while the land and aviation censuses are done less frequently and on a much smaller scale.

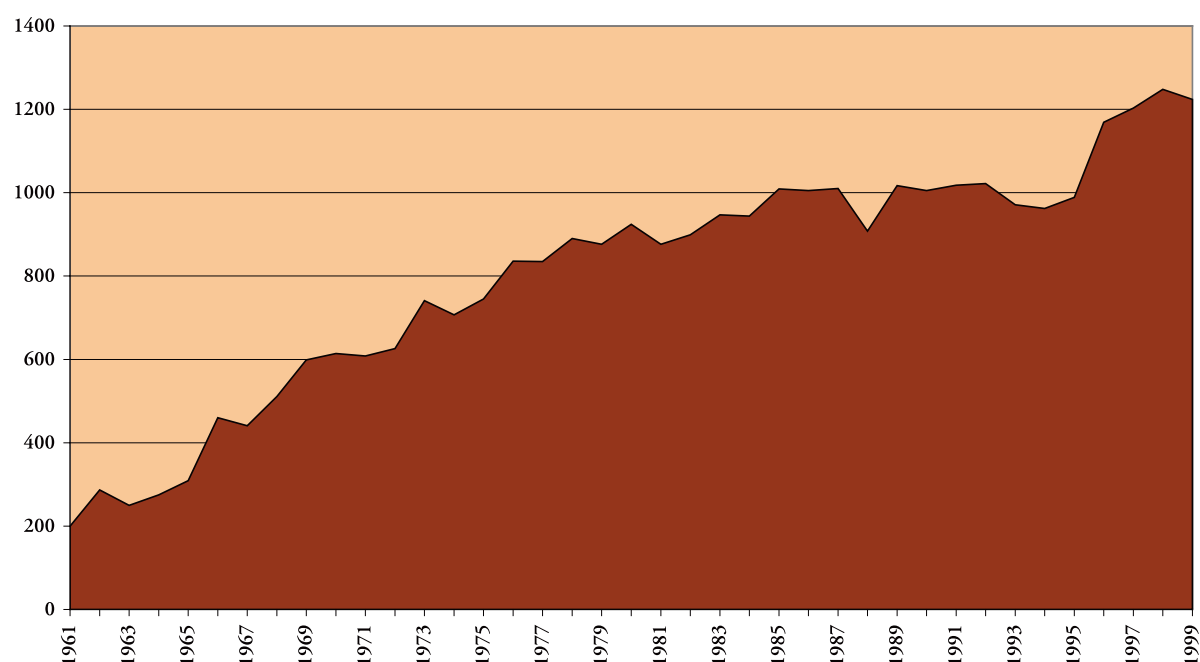
On the whole, the wild reindeer range in Russia comprises the tundra and forest-tundra zones, the major part of the taiga zone and mountain-taiga areas of South Siberia. But the main part of the wild reindeer population (about 85 %) is concentrated in three large regions: Taimyr, Northern Yakutia, and Central Chukotka (Figure 14). The area of these three regions is not more than 15% of the total wild reindeer range in Russia. The largest population occupies Taimyr and the parts of Evenkia, Yakutia and Western Siberia, that share borders with Taimyr (see text in the box).

In other regions of Russia there are few wild reindeer. Only in 9 regions their number is 5-20.000 (SEE MAP). In most of Russia the wild reindeer range has been separated into numerous isolated areas becoming smaller and smaller. Thus, in the major portion of its total range, the number of wild reindeer has been decreasing. The increase in the total number of wild reindeer in Russia can be accounted for only by the population growth in Taimyr and Central Chukotka.

### *Problem of leading away domesticated reindeer by wild reindeer*

First of all, it is necessary to remember that domesticated reindeer frequently desert their herd irrespective of the presence of wild reindeer. Desertion generally takes place because of a wrong way of herding, when

Figure 13: Dynamics of Wild Reindeer Number in Russia, Thousand



reindeer have to remain for a long time on heavily trampled pastures, when they are exhausted due to blood-sucking insects, and so forth.

Reindeer herders are inclined to assign losses of reindeer to the following causes: death due to wolves or reindeer led away by wild reindeer. Although it is not fair to calculate the losses of domesticated reindeer due to wild reindeer from official documents, it is generally thought that a large part of the loss is attributable to wild reindeer.

However, in areas where wild reindeer are far more abundant (in Taimyr, the northern part of Evenkia, several regions of Yakutia and Chukotka) the picture is quite different. According to data from M.Kh.Geller (1969), in Taimyr and Evenkia in the period between 1958-1967 a total of 15,000 domesticated reindeer or about 1,500 animals per year were led away by wild reindeer. During this decade, the reindeer chose a non-standard direction for the winter migration. 1,500 per year is not a big number, especially when one considers that hunters bag 7,000 to 8,000 wild reindeer every year in this period.

As a rule there is no special item on the number of domesticated animals led away by wild reindeer in the annual statistic reports of the agricultural enterprises. V.M. Safronov (1999) notes, that in northern Yakutia in many cases all lost domesticated reindeer have been considered led away by wild reindeer. He calculated, that between 1985-1989 all sovkhoses of the North-

Eastern Yakutia lost 58,700 domesticated reindeer. 28,900 of them were lost within the ranges of the Yana-Indigirka and the Sundrun populations of wild reindeer, and 29,800 in areas without wild reindeer. The rate of domesticated reindeer lost by sovkhoses situated within the ranges of wild reindeer populations made up 6.8% of total number of animals, and the same induce in other sovkhoses is 4.6%. The difference (2.2%) is remarkable but not very important.

Unlike other regions, the Agriculture Department of Chukotka AO makes official accounts of domesticated reindeer losses caused by wild reindeer. In 1999 wild reindeer led away 2,500 domesticated reindeer. It makes up about 7 % of all unproductive losses in the Chukotka AO (36,400).

On the whole, losses due to leading away domesticated reindeer by wild ones sharply increase when large herds of wild reindeer change their familiar routes of migration and pass to other areas where reindeer herders are not prepared for their invasion.

As reported by Oleg Etylen from the Research Center "Chukotka" (Anadyr town), when lot of wild reindeer for the first time crossed the Anadyrsky mountain ridge and invaded in the pasturelands of the sovkhos "Omolon" almost half of one large sovkhos's herd (about 2,000 animals from 4,500) were led away instantly. The sovkhos director called for a helicopter with two riflemen, who began to shoot wild reindeer. As a result, the herd dissipated, wild animals mixed up

Map 7: Number and Distribution of Wild Reindeer (data of Centrokhotkontrol)

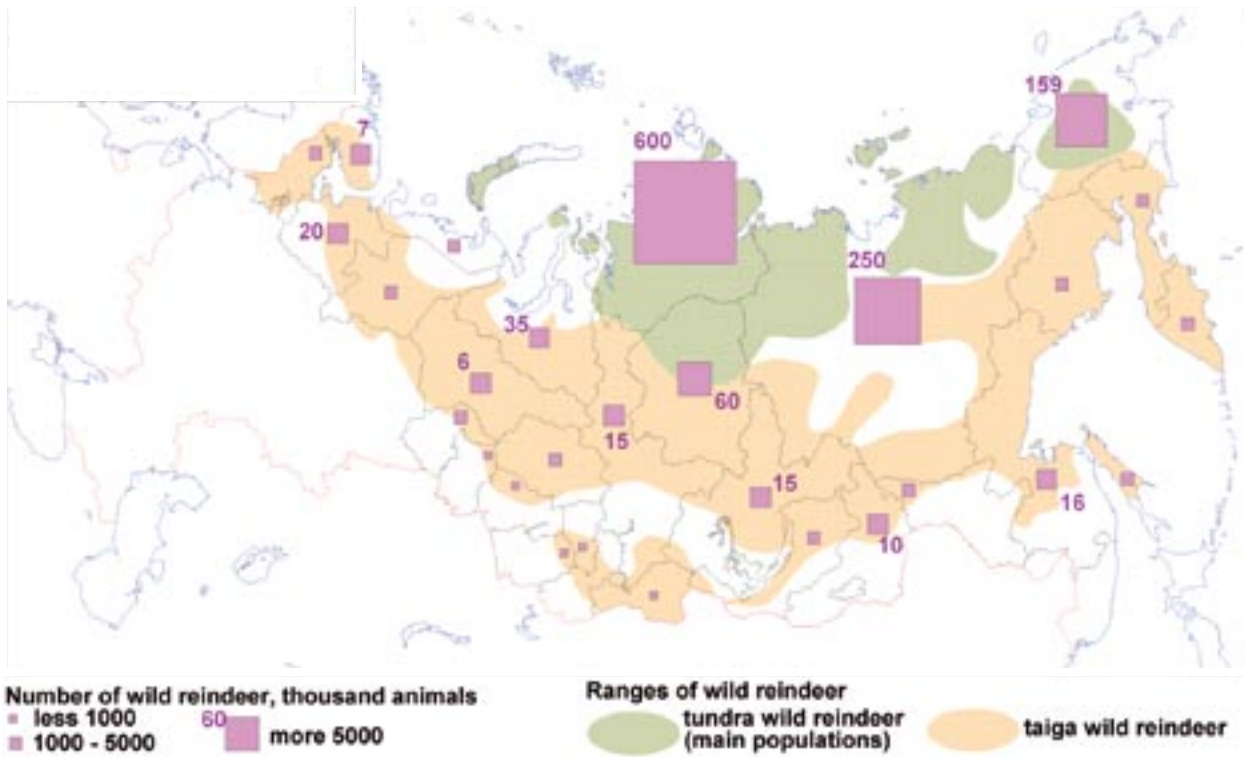
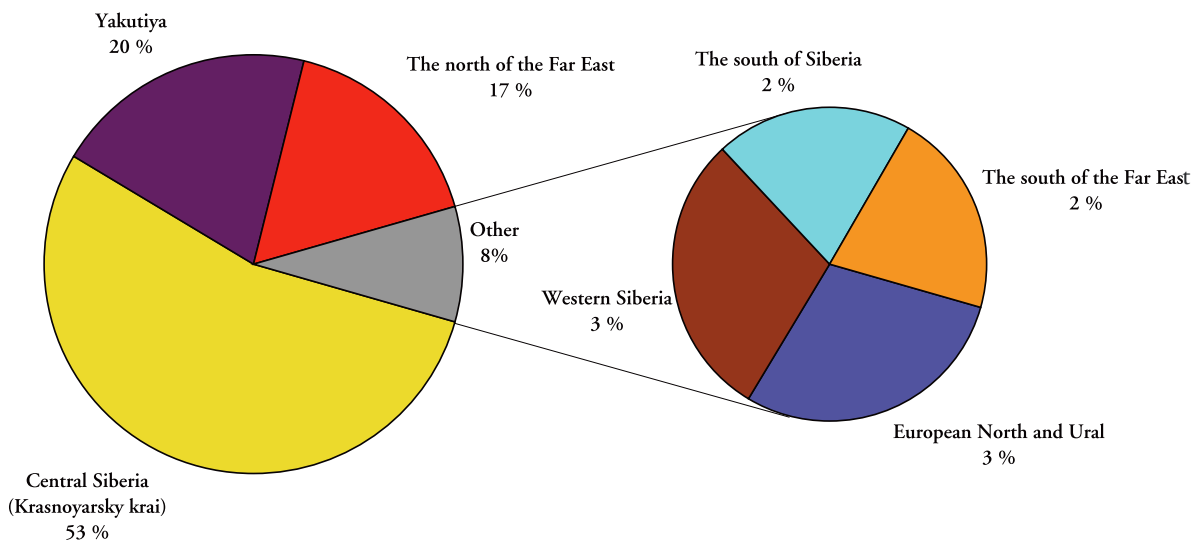


Figure 14: Number of Wild Reindeer in Regions of Russia on 01/01 1998, %



### **T**he Taimyr Wild Reindeer Population

*At present the Taimyr population remains the largest in Russia and, maybe, in the world. During the last 20 years, it has numbered about 500.000-600.000. There are different assessments of the actual size of this population (from 354.000 to 1.082.000 animals). Most probably the number is between 800.000-1.000.000. The wild reindeer in Taimyr are typical migrants. The distance between their calving places on the tundra and their overwintering places in the forest-tundra and northern taiga can be up to 1.000-1.500 km. A favourable factor for the flourishing of the Taimyr wild reindeer population was the absence of tensions between wild and domesticated reindeer. The reindeer husbandry on the Taimyr Peninsula has never been large-scale (up to a maximum of 120.000-130.000 domesticated reindeer in the 1960's). Under growing pressure from the increasing wild reindeer population, and in view of social influences the reindeer herding in Taimyr has been receding. At present, in the Taimyr Autonomous Okrug there are only a few tens of thousands domesticated reindeer left, they are mainly owned by the Nenets near the western boundary of the Okrug, on the left bank of the Yenisey River. Reindeer husbandry in the central part of Taimyr has dissolved almost completely. A small number of domesticated reindeer has remained in the ownership of the Dolgans. Nganassan reindeer herding has disappeared completely. The recession of reindeer husbandry has been brought about not only by social factors, but also by wild reindeer herds regularly leading away domesticated reindeer. In recent years, the ecological and economic control over the unique wild reindeer population on the Taimyr Peninsula has been lost. Nobody but wolves and poachers hunt wild reindeer. These are the only limiting factors for the wild reindeer population. A collapse of this population is possible because of overgrazing and exhaustion of pastures. According to estimates done by L.A. Kolpashchikov (1983, 2000), the utmost possible limit for the Taimyr population is 820.000-850.000 reindeer. It cannot be excluded that epizootics may spread there, in particular anthrax infection because in many places in Taimyr the domesticated reindeer that have died of anthrax are buried. The infection can survive quite well under permafrost conditions and is able to affect animals many years later if the burial places are disturbed.*

with domesticated reindeer of other sovkhos's herds created even greater losses.

In an other case the herders already knew how to protect their herd from wild reindeer. They also called a helicopter, which put them around the mixed herd of wild and domesticated reindeer. Then they began to move closer to the herd very cautiously. Slightly alarmed wild animals moved apart while domesticated reindeer allowed the men to get near them. This method gave the herders a chance to return almost all withdrawn animals. If the men had frightened off the wild reindeer the whole herd would have escaped. Usually the difference in behavior of wild and withdrawn domesticated reindeer remains for about one month. During this period it is possible to bring the animals back.

According to information from reindeer herders, when the wild reindeer move en masse, no frightening measures are effective against them. In some herds domesticated reindeer were protected around the clock. Rockets were burned, rifles fired - all in vain.

Nevertheless, most often the wild reindeer led away separate groups of domesticated animals which before had been "cut off" from their herd and pastured out of the herders' control. When herders keep up their herd closely and do not permit animals to move astray, leading away seldom occurs (Safronov, 1999).

At present, the data are insufficient for drawing conclusions, and measures to protect domesticated reindeer from being led away by wild reindeer require special research. Scientists have yet to suggest even one



sound measure to protect a herd; efforts towards protection have been based on the experience and initiative of the reindeer herders themselves.

The research Center “Chukotka” in Anadyr has been engaged in the problematic relationship between wild and domesticated reindeer since 1998. The purposes of researchers are to define exact limits of the wild reindeer population range, to carry out the monitoring of its seasonal migrations, to collect data on different methods that herders use to preserve their herds from contacts with wild reindeer, and also to study the ethology of wild and domesticated reindeer. From the 1950-1960's the land-use division of pasturelands quite often does not allow herders to maneuver their herds to avoid contact with wild reindeer. Besides, they do not receive in time the information about wild reindeer displacements. Therefore, one important task is to create an observers network of herders, hunters and specialists of reindeer husbandry to collect and transfer all notifications about the migrations of wild reindeer.

Such a network would also allow the integration of scientific approaches with traditional knowledge, to note the most important changes in the wild reindeer population ecology and behavior and to form a base for a resource management.

#### *Pasture competition of domesticated and wild reindeer*

Wild and domesticated reindeer may be considered as two ecological forms of the same species, occupying somewhat different ecological niches in the biocenose. This fact is of practical significance.

Wild reindeer utilise pastures in a different manner than the domesticated reindeer because their grazing habits differ. When domesticated reindeer grazed on the same pasture for a long time, the fodder base is overgrazed. This is especially typical of winter lichen areas. Under these conditions, keeping the herd in one place or rarely changing herd areas is important because the reindeer trample the pastures around the herders camps.

Wild reindeer feed while on the move, covering a distance of 2.500 km during a year in the Taimyr-Evenkia region. “Wilds” do not stay in one place for a long time and change their path every year, resulting in a natural rotation of pastures.

All this indicates that wild reindeer use lichen pastures in a more rational way than domesticated ones.

In the absence of wild reindeer overpopulation, the specificity of their grazing excludes trampling of pastures (Kolpatchikov, 2000).

The main places of wild reindeer grazing are located in the areas where it is difficult to pasture domesticated ones. The diets of both forms of reindeer also differ greatly.

One can assume that with a wise economic development it would be possible to have a combined use of the northern ecosystems by domesticated and wild reindeer. This would permit a use of the available biological resources of reindeer pastures in a more rational manner. But this is not an easy thing to do from the organisational viewpoint, although it would undoubtedly be rational from an ecological position.

As for the last problem – contribution of wild reindeer to preservation of various nidi of infectious diseases – numerous data show that the wild reindeer are inflicted by infectious diseases much less than the domesticated ones. Nevertheless, in the Taimyr area where wild reindeer use pastures with several anthrax nidi the danger of anthrax flares is very likely.

#### *Conclusions*

On the whole, the combination of reindeer herding and wild reindeer hunting is a rather difficult problem to solve. From the biological viewpoint, the wild reindeer have a number of advantages compared with the domesticated ones. Their productivity is higher; they use pastures in a more rational way, suffer less from infections and parasitic diseases, and better resist to gnats.

Assuming a wise economic development it might be possible to have a combined use of the northern ecosystems by domesticated and wild reindeer. A new concept of – the so-called “wild reindeer management” (Syroechkovski 1986, 1995) means not simply the hunting of wild reindeer but a special branch of wild reindeer breeding based on remote methods and devices to control herds of freely grazing wild reindeer.

From the economic viewpoint, the wild reindeer hunting gives reindeer meat of higher quality and with less expenses than reindeer herding. So, the wild reindeer hunting can become a competitor of the reindeer husbandry and suppress it economically.

From the social viewpoint, only aboriginal peoples are occupied with reindeer herding. The wild reindeer hunting is not a prerogative of indigenous peoples, the incomers can repress the native hunters.

What are the social and economic advantages and disadvantages of wild reindeer hunting compared to reindeer husbandry for aboriginal peoples of the North?



Chukchi Woman from the Basin of Belaya River in Central Chukotka, Russia  
Photo © Konstantin Klovov

One would think that the wild reindeer management, or hunting, created optimal possibilities for the development of a traditional way of life for a number of indigenous peoples who historically were more reindeer hunters than reindeer herders (like the Nganasans, Yukaghirs, etc.). But actually this was not the case. The development of wild reindeer management in Taimyr needed a considerable number of good hunters, and besides aborigines, a lot of incomers took part in the wild reindeer hunting (for example, the workers from the Norilsk metallurgical plants during their leaves). The earnings during a short, well organised season of reindeer hunting (during the period of autumn migration) were very high, even higher than at the metallurgic plants. As a result, more "productive" and better organised incomers gradually supplanted most of the aboriginal hunters.

It is clear from a simple analysis of the wild reindeer populations that only inhabitants of Taimyr, northern Yakutia, Evenkia, and central Chukotka have possibility to hunt wild reindeer in number sufficient to survive (Dolgans, Nganasans, some of the Yakuts, Evens, Evenks, and Chukchi).

On the whole, one could say that if the number of wild reindeer in the taiga and tundra becomes higher, practically all indigenous peoples will have the possibility to combine reindeer husbandry with a relatively small wild reindeer hunting for their own personal needs. For this purpose additional measures for the protection and restoration of the wild reindeer in the taiga zone are necessary.

The Dolgans, the Nganasans and partly the Yenisey Nenet, living within the sphere of seasonal migrations of the large Taimyr population of wild reindeer, as well as part of the Yakuts and Evens from northern Yakutia, could make the wild reindeer hunting a base of their traditional economy having also a small-scale reindeer husbandry for personal utilisation and transportation.

The East European and West Siberian Nenet, on the contrary, can survive having conserved their productive large-herd reindeer husbandry even though all wild reindeer were exterminated long ago.

The other peoples have to combine reindeer husbandry with wild reindeer hunting in different ways taking into account that the situation in both branches is critical.

A practical solution to this complicated ethno-social problem: what to choose - reindeer herding or wild reindeer hunting, must be evaluated on the basis of the concrete situation in the area of each aboriginal people.

## Relationships between reindeer enterprises and industrial companies exploiting mineral resources in the reindeer husbandry area

The process of formulation of contracts between the indigenous peoples of the North and governmental and non-governmental organizations, that is taking place in the Russian Federation, is a sign of a formation of civilized partner's relations. The following spheres of collective legal relationships are especially important for the reindeer management: the right of possession and disposal of the lands of traditional resource management and rational use of financial means, allocated by industrial companies as compensation for use of nature resources of these territories.

There are a number of regional laws and normative acts on the issues of land use and possibilities for the influence of indigenous peoples on the forms of use of lands on their traditional territories. The process of bilateral regulation of such interrelations is most developed in the Sakha, Komi, and Buryatia Republics and Yamal-Nenets, Khanty-Mansi and Taimyr AO. It is no wonder, that in particular in these regions a practice of conclusion treaties and agreements between different economical subjects is most developed (Peliashov, 1998).

It was repeatedly spoken about financial means, allotted by mining companies. Unfortunately, under the present system of transfer the concrete reindeer herder is the last one, to whom is reached by these means. There is a number of barriers in the way of their transfer and, consequently, the use for the reindeer herders' needs, such as important daily tasks - the provision of the social sphere of the settlements, where reindeer herders' families live, schools and infant schools, doctors, etc. The reindeer herder and the mining company do not have the possibility to conclude a direct treaty, for example, on construction of a slaughter house. Under this situation the companies and the administration can put pressure upon the reindeer herder. At present a great number of complaints are put forward mainly by representatives of clan land users about failure to take their opinion on the land withdrawal into account. However, on paper the decision is approved and signed by the representatives of all sides - the company, the administration and the reindeer herders.

Is there any solution? Yes, on condition of a direct participation of the reindeer herders from the enterprises of all forms of ownership in the distribution of financial allotments when the territory is withdrawn



for oil and gas exploitation. In this situation the collective enterprises could secure their interests as they have lawyers and financiers in their staff. A specially created juridical service of the RHUR could undertake the protection of the interests of the clan communes.

## Legal Basis for the Regulation of Reindeer Husbandry

### General characteristic of the legal base

At present the legal status of the reindeer husbandry in Russia is not determined by any special governmental laws. The legal regulation of the reindeer husbandry in Russia is executed in accordance with juridical acts on regulation of agro-industrial complex in Russia and with norms of the Constitution of the RF, Land, Civil and Forest Codes of the RF, the federal law on the rights of indigenous peoples of the North, Siberia and Far East, the legislation on ecology and use of mineral resources. Laws and by-law acts on enterprises and business activities are also important in reindeer husbandry.

The situation in the regional legislation, regulating different aspects of the reindeer husbandry (first of all, land, forest, and the use of mineral resources) is

to some extent ambiguous. On the one hand, a new, progressive stage in the development of Russian law is demonstrated by its regionalization and ethnization. On the other hand, regional and local (municipal) legal initiatives, giving voice to expectations and aspirations of the “provinces”, reveal increasing frequency show non-agreement with the federal legislation.

The present regional and local normative-legal acts on reindeer husbandry and related issues should undergo considerable revision in view of the passing of the new Land Code, inserting amendments of the Civil and tax Codes, coming corrections of the Budget Code and other branch system acts. The reform of the Land legislation in the RF is especially affecting their future.

At the end of 2001, when the new Land Code, responding to modern market relationships and clearing up the issues of land rights considerably, was set into operation, only three of the Russian regions had special laws on reindeer husbandry. They were the Yamalo-Nenets AO (Law “On reindeer husbandry”, 1998), the Sakha Republic (Law “On reindeer husbandry”, 1997) and the Chukotka AO (Law “On State Support of Reindeer Husbandry Development in Chukotski Autonomus Okrug”, 2000). The present of the law proposals in the Khanty-Mansi AO and the Magadan Oblast could be regarded as a progress in this sphere. Questions, concerning adoption of special laws on reindeer husbandry, were discussed and sub-

Nganasans Boys from the Piasina River in Central Taimyr, Russia

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mitted for consideration of the legislative bodies of the subjects of the RF by initiative groups in the Nenets AO, the Murmansk Oblast, the Komi Republic and the Evenki AO as well as on the federal level.

A comparison of the regional laws in force and projects of the present regional normative acts with the project of the federal law on reindeer husbandry shows a common aspiration of all lawmaking groups to achieve common goals. All present normative acts and projects of the laws on the federal and regional levels regard reindeer husbandry as a kind of traditional economic activity of the indigenous peoples of the North and other "ethnic communities". At the same time it is specially remarked, that reindeer husbandry is an indispensable condition for the preservation of the traditional way of life and the original ethnic cultures.

Nevertheless, one can notice several shortcomings in the regional normative-legal acts on reindeer husbandry. They are:

- overloading of the list of basic conceptions with biological and zoological terms, while they are not used in the text of the law;
- careless formulation of the single norms;
- incompetence in the sphere of land relationships;
- lack of logical comprehension of juridical qualification of proprietary right in general (possession, disposal, user), and others.

Under the general tendency to develop regional legislation, the regional normative-legal acts of the subjects of the RF on reindeer husbandry seldom demonstrate competence on ethnic specificity of the territories. In addition, regional normative-legal acts are usually written in language too complicated for the reindeer herders' understanding. Thus, they could hardly be used effectively for protection of their own rights. It can be admitted, that the pseudo-juridical language of some regional and local juridical acts is incomprehensible also for specialists. Besides, the reindeer herders generally do not have the laws texts. This circumstance affects the development of the legal activity of the reindeer herders. They are often unacquainted with law contents even in a general matter.

## The Economic-legal base for the development of the reindeer husbandry

Since 1990 the Russian legislation, devoted to agricultural problems, has undergone considerable changes, which were caused by the reformation of land, production and civil relationships in the country. These changes were due to official recognition of the equal rights of all forms of ownership, including land rights, as well as the diversity of organization-legal forms of enterprises and freedom of its economic activity.

The most important principles of reorganization of collective- and state enterprises for the traditional economy of the indigenous peoples were the following:

- voluntariness of the choice of organization-legal form of the enterprise (within the bounds of current legislation);
- social justice and protectability of the population and employers connected to the enterprises under reorganization;
- and responsiveness to its national and historical specialties.

The last two principles practically were not realized in the northern territories. Progressive decrease in living conditions and trampling on their traditions was the evidence of this fact.

During the first years of the land reform practically all collective- and state enterprises, related to traditional branches, were reorganized. Agricultural co-operatives, close and public corporations, joint-stock companies and farmers' enterprises appeared on their base. In practice reindeer pastures were not transferred to private ownership of the herders, but carried over common joint or common shared property. At the same time, allotment and distribution of the shares from collective- and state enterprises' pastures, as a rule, was not confirmed by an allotment certificate. As for reindeer herders who have left the collective- and state enterprises and started their own business, they usually have received unoccupied pasture lands. "Allotment" of such grounds was mainly based on the norms of common law and other local traditions.

In the process of reorganization the reindeer enterprises were usually regarded as agricultural producers regardless of their specific features. Thus, the new organizational forms, such as farmers enterprises, were introduced in reindeer husbandry in the course of the



Chukchi Girl from the Bassin of Belaya River in Central Chukotka, Russia  
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land reform. According to asset 23 of the Civil Code of the RF and the law “On farmers’ enterprise”, the farmers’ enterprises could be created by single persons, by families or other groups of people for production, processing and sales of agricultural products. The head of the farmers’ enterprise is regarded as a businessman without creation of a legal person. In reality most part of the “farmers enterprises” in reindeer husbandry turned out to be a completely unsuitable organization form and crashed.

“Clan grounds” is a new, specific and in juridical aspect practically baseless local organization form within the traditional economy of the northern indigenous population (this form is not noted in the Civil Code of the RF). As a rule they can include reindeer pastures, hunting grounds, and traditional places for fishing and gathering used by the indigenous population. According to the legislation the clan grounds are transferred to their owners with a right of heritable life tenure, but not as a property or rent. The issue of realization of the right of ownership to clan grounds (including reindeer pastures) remains open.

The activity of the “indigenous peoples’ community” (or “clan community”), is unlike joint-stock companies and producers’ co-operatives characterized by the law as non-profitable. That is why, according to the legislation, the clan community could get tax

allowances and other benefits. The local government can conclude with a clan community contracts for projects execution and rendering services, and grant them special financing.

The law considers the clan community as a form of self-organization of the indigenous peoples. It has determined the right of community for traditional economic activity and its obligatory registration as a legal person. At the same time, the law has not fixed the land rights available for the clan community and has not determined the order of registration of these rights.

Changes concerning the right of heritable lands tenure are important for the development of reindeer husbandry. This right could be successfully spread over the territories of indigenous peoples of the North in the course of formation of farmers’ enterprises, as well as clan grounds and clan communities.

It should be noted, that according to Russian legislation, everything which is under the soil is in state ownership. This is especially actual for the regions rich in mineral resources, like Khanty-Mansi AO and most of the territories of reindeer husbandry.

At present practically all reindeer pastures (as well as agricultural lands) are in the state or municipal ownership. Economic subjects in the reindeer husbandry reserve for themselves such types of land rights

*It is indicative that in the Khanty-Mansi AO the process of realization of the right concerned went on between 1992 and 1998 with variable activity. The appearance of the “clan grounds” (about 300) promoted the development of private reindeer husbandry and the preservation of the reindeer husbandry in the Khanty-Mansi AO in general.*

*A new order of withdrawal and allotment of the clan grounds was determined with passing of new federal legal acts and the Law of Khanty-Mansiiskiy AO “On withdrawal and allotment of lands on the territory of the Khanty-Mansi AO” in 2000. The law obliged the owners of earlier received “clan grounds” to revalidate them according to new federal and regional legislation on land, forests, waters and mineral resources. This was practically an official preclusion for reindeer husbandry made by the government bodies. For the main part of the indigenous population of the Khanty-Mansiiskiy AO occupation in reindeer husbandry and other traditional branches of economy could be provided only by the preservation and spreading of the right of heritable life tenure for land plots.*

*The new Land Code of the RF (2001) once again reviewed the given right. Asset 21 of the Code establishes inadmissibility of allotment of the land plots as heritable life tenure to the citizens. Although the new Code gives the possibility for citizens, owning the land plots as heritable life tenure, to acquire them as property, this possibility could hardly be realized by the reindeer herders.*



as usufruct (permanent or temporary) and heritable life tenure for the lands of the state and municipal ownership, common joint and, rarely, common shared property, as well as landowning as a lease.

Today, one can notice from the state an ambivalent attitude to the proprietors of lands, land-users, landowners or leasers, including reindeer enterprises of certain forms of ownership, owners of clan grounds and clan communities. This concerns reindeer herders as well as all representatives of the indigenous peoples of the North, organized into small producers' collectives. Thus, in the logic of the legislation, the establishment of the right to receive the land plots for agricultural works (reindeer husbandry in Russia is considered as an agricultural branch, closed to cattle-farming) as a property by any natural person, including farmers, seems incomprehensible. It is also evident, that existing types of land rights, vested to agricultural producers, will be reviewed once again in connection with the passing of a special law on turnover of agricultural lands.

## The State-legal rehabilitation of the reindeer husbandry as a branch of agriculture

Addresses of state authorities to the problems of agriculture, as well as general attempts of their state-legal settlement, took place time and again during the last decade. The federal law "On state regulation of agro-industrial production" (1997) represented as especially important step in this direction. Its basic principles and standards are a legal platform for solutions to numerous serious problems in the branches of agro-industrial complex, including reindeer husbandry.

The law determined, that the state carries out the financing of the agro-industrial complex at the expense of the federal budget means, budgets of the subjects of the RF and off-budget sources. It guaranteed also the possibility for free sales of products, raw materials and foodstuffs for all categories of agricultural producers.

According to the Law, the Government of the Russian Federation could determine guiding prices and



Chukchi Settlement, Bassin of Belaya River, Central Chukotka, Russia

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guaranteed prices for agricultural products (including reindeer meat and other products of reindeer husbandry), raw materials and foodstuffs.

Guiding prices (normative indicators) were fixed for the providing of parity price relations for industrial and agricultural production and covering losses, caused by taxes, other outgoings and credit interest payments. Guiding prices were regarded not only as a base for the fixing of guaranteed prices, but also for the establishing of pawning rates, as well as for the calculation of grants and allowances for agricultural producers.

Guaranteed prices for agricultural products, raw materials and foodstuffs could be applied in the case, when average market prices are lower than the guaranteed ones. Guaranteed prices could be applied, when selling agricultural products directly to the state, as well as for additional payments to producers in the sphere of the agro-industrial production. The Government of the RF determines the list of agricultural products, raw materials and foodstuffs, for which

guaranteed prices are fixed, volumes (quotas) of their sales at those prices, level of guarantee for the prices and their indexation, as well as, essentially, the order of their application.

By the end of the perestroika decade the reindeer husbandry issues were still in the focus of attention of the state authorities. In spite of the failure to pass a federal law on reindeer husbandry Russian leaders rather actively showed their interest towards the “most weak places” of the economy of the country. As a result, a special Governmental Decree devoted to the development of the additional measures of state support of northern reindeer husbandry in 2000-2005 was passed. A more definite distribution of tasks, necessary for its realization was carried out by the Ministry of agriculture of the RF which approved the special Order and the “List of Priority Activities for the Development of the Reindeer Husbandry”. It recommends to pay a special attention towards involvement of “the means of organs of executive power of subjects of the RF in the northern



Chukchi Settlement, Bassin of Belaya River, Central Chukotka, Russia

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regions as equity participation”, as well as the means of foreign investors and other producers. The creation of joint enterprises together with foreign companies, should be applied for the development of the “base for processing and sales of reindeer husbandry products”. The Order took into consideration the whole spectrum of reindeer husbandry problems; including adjustment of financial (credit, budget, investment),

custom, leasing, land-use, ecology, veterinary, ethnic and other aspects of production relationships, existing in the given branch.

Now, the perspectives of the preservation and development of the reindeer husbandry in many respects depend upon the tendencies, that appear in the Russian legislation and legal practice.

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