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Executive Summary

Introduction

The project Sustainable Reindeer Husbandry is a direct follow-up of the international workshop held in Kautokeino in March 2000. The title of the workshop was “Sustainable Reindeer Herding and Husbandry”, and approximately 70 persons from Canada, Russia, Denmark/Greenland, Norway, Sweden and Finland attended the workshop.

The question of how the Arctic Council can continue its work on reindeer husbandry was an important issue at the workshop, and one of the statements from the Chairmen’s Summary emphasised the importance of bringing reindeer husbandry on the international agenda and that the Arctic Council should initiate a project to survey the situation in the reindeer husbandry industry.

Norway brought a proposal of such an international project to the Arctic Council, and the project was approved at the Ministerial meeting in Barrow, Alaska, in October 2000.

The formal start-up for the project was October 1st 2000, and the project period is until 31st of December 2002.

Russia

The reindeer husbandry in Russia today is receding. As a consequence of the transitional period and changes of economic priorities in the Russian economy after the collapse of the Soviet Union, the total reindeer stock has been reduced twice. Nevertheless, Russia still has two thirds of the world’s population of domesticated reindeer.

Unlike other Arctic countries the reindeer husbandry in Russia is very differentiated: representatives of 18 peoples are engaged in the industry and preserve their national traditions due to reindeer husbandry. 16 of them are included in the official list of indigenous small-numbered people of the North.

The main areas of recession, where the reindeer stock has been reduced 4-5 times, are in the North-Eastern regions of the Russian Federation (RF) and in the Siberian taiga. The number of reindeer in the North-Western part of Russia is fairly stable.

The decline of the industry results in poverty for the indigenous population connected with it. Because reindeer husbandry is the base of the traditional culture and way of life of many indigenous peoples this



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has a destructive impact on the nomadic herders' families and ethnic traditions.

A specific feature of the reindeer husbandry in Russia (compared with other Arctic countries) is the central role of reindeer enterprises with public and state forms of ownership. The rate of reindeer in private property still remains low even after reforms during the last decade. Enterprises consist of herders brigades. A brigade is a group of herders' families, usually related to each other, who jointly manage the herds within a designated pasture area. The brigade was introduced as an organisation principle during the Soviet period, and it is generally agreed to consider the brigade as a the basic productive unit in reindeer husbandry.

Reindeer enterprises are subordinated to the Departments of Agriculture in the Administrations (Governments) of the Subjects of the RF and to the Russian Ministry of Agriculture on the federal level.

During the latest reforms, the management system of reindeer husbandry in Russia has been reduced considerably. Today, it is not in a position to control the situation, especially on the federal level.

Reindeer herders in Russia are practically deprived of the possibility to participate in decision making processes in the reindeer husbandry management. The

NGO's of the reindeer herders need to be strengthened. An important NGO is the Reindeer Herder Union of Russia (RHUR), which works in contact with the Russian Ministry of Agriculture in Moscow. The RHUR was established 7 years ago, and it is a member of the Association of World Reindeer Herders. The RHUR suffers under a constant lack of funding and staff that prevents it from working efficiently.

The present economic situation in the Russian reindeer husbandry is not favourable. The domestic market is not developed, although its potential capacity is enormous. Selling prices on reindeer meat are very low.

During the last decade the intensity in the reindeer industry dropped and meat production in the enterprises was reduced by 3.4 times. At the time being reindeer husbandry is profitable only in Murmansk oblast', where the meat is sold for export at a higher price. In other regions the industry recedes despite grants allocated from the federal and regional budgets. However, its profitableness could be considerably increased by value-adding production, including high quality of reindeer meat and other products like soft and dried antlers, deer skins, blood, etc.

Pasture resources are sufficient for a further development of a sustainable reindeer husbandry in most

parts of the Russian North. However, in Yamal-Nenets Autonomous Okrug, which is the greatest region of reindeer husbandry, pastures are heavily grazed. That is especially concerning since the Yamal Peninsula is the most important area of new oil and gas exploitation development in Russia.

The decrease in the reindeer industry has stimulated the growth of several wild reindeer populations in Taimyr, Yakutia and Chukotka. The wild and the domestic reindeer, as ecological antagonists, constantly confront each other. In addition, the wild reindeer hunting produces meat at a low price and becomes a competitor for the reindeer industry. On the whole, the combination of reindeer husbandry and wild reindeer hunting is a rather difficult problem solve.

The legislation on reindeer husbandry has made an important progress during the last years. Now, three subjects of the RF have special laws on reindeer husbandry, although the federal law was not adopted. In all legal acts and law drafts the reindeer husbandry is regarded as a traditional economic activity of the indigenous peoples of the North and as an indispensable condition for the preservation of traditional cultures and ways of living. However, at the present stage the legal system in Russia still does not secure the herders' rights in reindeer husbandry. Legal acts are focused mainly on reindeer enterprises and set aside private reindeer owners.

Based on the background information collected for this project, we would make the following recommendations:

- It is expedient to develop the legislation on reindeer husbandry in Russia further, and to prepare favourable conditions for the ratification of the ILO Convention no. 169.
- It is expedient to support and develop the NGO's of reindeer herders. The aim is to enable a constructive dialogue between the herders organisations and the Russian Government.
- In order to get the reindeer husbandry in Russia sustainable, an economic, social and technological system based on scientific recommendations and research should be realized. The first variant of a State programme has been worked out by the Russian Reindeer herders Union and Yakutian scientists.

- In areas of considerable recession (the taiga zone and the North-East of Russia) the most urgent is to prevent a further decrease in the domesticated reindeer stock and to improve the life conditions for the reindeer herders' families.
- In the North-Western part of Russia – where the reindeer husbandry has remained stable – it is expedient to improve the facilities for the production of reindeer products through:
 - investment in slaughtering houses to secure high quality meat,
 - investment in new technologies for full utilization of reindeer carcasses (incl. antlers, skins, blood, glands for medicament and bio-preparations, etc.),
 - development of a domestic market for reindeer meat and other reindeer products.
- Lack of pastures is a problem mainly in the Yamal-Nenets Autonomous Okrug. This problem is enhanced by the oil and gas exploitation development in the area. Measures should be taken to secure the future of reindeer husbandry in this region.
- The large population of wild reindeer in Taimyr, Yakutia and Chukotka create difficulties for the reindeer husbandry in these regions. A management system focusing on pasture use and exploitation of wild reindeer resources based on scientific recommendations should be introduced to resolve the wild reindeer problem.

Alaska

From the first introduction of domesticated reindeer in 1892, Alaska experienced a rapid growth in the reindeer population. Around 1930 there were approximately 600.000 reindeer, half of these located on the Seward Peninsula. The decline of the reindeer population began in 1933, and by 1950 only 25.000 reindeer remained. In the period 1950-1992 the number of reindeer increased to 41.000 animals, but then fell to 19.000 in 1999. The estimation for the Seward Penin-



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sula 2001 is 9.000 reindeer and the industry is facing a major crisis at the moment.

The reindeer industry has made up an important part of the economy on Seward Peninsula for over a century. It has provided employment, food and income to residents in the area where employment opportunities were scarce. During the last 10 years, the industry has employed approximately 150 local people in different locations on the Seward Peninsula, in addition to the people employed on the different islands. The peak income of the industry on Seward Peninsula amounted USD 1.500.000 in the early 1990's, when 15 herds were in operation. Today the reindeer industry suffers direct losses of \$1 million annually due to the caribou problem and the soft antlers prices.

The reindeer industry on the Seward Peninsula is facing a major threat at the moment, and this is the growing Western Arctic Caribou Herd (WACH). The herd numbers approximately 440.000 animals, and is penetrating further and further into the Seward Peninsula. The economic value of the range resource throughout the peninsula is being devastated, and once depleted, it will take many years to recover. The huge caribou herd also attracts predators, but

the most serious is the "run-off" problem. In a situation with a mix-up between domesticated reindeer and caribou, the reindeer will follow the caribou herd on its migration. All efforts to try to keep the caribou herd away from the grazing areas of the domesticated reindeer have been without result.

The market for reindeer meat in Alaska is good. There is a demand in the local stores and from groceries in Anchorage. All the meat available on the market is sold. There is also a market for deliveries to the "high-end" restaurants in the "lower-48's". The challenges connected to the market are different kinds of infrastructure - access to abattoirs, transport, transport costs and a demand for better docking facilities on the islands.

The Reindeer Act of 1937 is an important law, restricting ownership of reindeer to the native peoples of Alaska. This right has been questioned by the court system of Alaska, which states that the Reindeer Act of 1937 only gives the exclusively right to reindeer husbandry of reindeer inside the State of Alaska, and not for import of reindeer for sale.

Based on the background information collected for this project, we would make the following recommendations:

- The growing caribou herd represents a major threat to the reindeer industry in Alaska. This calls for a joint effort between the national management system and the industry. Without a solution the industry will face a major crisis in a few years.
- The reindeer industry on the islands of Alaska have several advantages that must be utilized. There is no problem with caribou or predators. However, the transport cost in Alaska is a disadvantage for the development of the industry. To be able to realise the potential of the industry it is important to provide proper infrastructure like abattoirs, transport and docking facilities, and make the transport costs reasonable.
- To further improve the management of the industry at all levels there should be a focus on the educational system. An establishment of a reindeer herding school could inspire the younger generation to secure the future of the industry.
- The exclusive rights to own reindeer for the native peoples in Alaska must be secured. The Reindeer Act from 1937 is under threat, and to secure these rights will give the native peoples of Alaska an opportunity to make a living out of reindeer husbandry within their areas.

Norway, Sweden and Finland

The reindeer pastures and the number of reindeer in Norway, Sweden and Finland are quite comparable. The figures for Norway for 2001 are 165.000 reindeer grazing on 140.000 square kilometres, or about 40% of Norway; the Swedish figures for 1998 are 227.000 reindeer grazing on 160.000 square kilometres, or about 34% of Sweden, and the Finnish figures for 2000 are 186.000 reindeer grazing on 114.000 square kilometres, or 33% of Finland.

In contrast to Russia and Alaska, the reindeer husbandry in Scandinavia faces a challenge because the pastures to a great extent are situated close to populated areas, and conflicts with other industries like farming and forestry are common. In the southern Saami area in Sweden and Norway these conflicts are threatening to undermine the whole industry.

The three different management systems in

Norway, Sweden and Finland are based on the same administrative principles. The responsibility of the national policy towards the reindeer industry is located to the Ministry of Agriculture. The Ministry of Agriculture delegates the executive authority of the reindeer policy to different government services outside the Ministry.

The Saami concept of “siida” (community) is the traditional way of organizing the reindeer owners, and their families. This concept is not part of the Norwegian, Swedish or Finnish management system today.

The Norwegian management system introduced the Norwegian concept of “husbandry unit” to reindeer husbandry. A husbandry unit is a licence given to one person in order to legally own reindeer and to be part of a reindeer district. One family could hold several husbandry units.

The Swedish system is similar to the Norwegian, but the licence is connected to the membership of a Saami village. Each owner is an individual enterprise, and like in Norway, one family could consist of several individual enterprises.

The reindeer herding licence in Finland is connected to the membership of a district. Unlike in Norway and Sweden, reindeer husbandry is not an exclusive right for the Saami, but can be performed by all citizens of Finland.

The number of reindeer in Norway, Sweden and Finland show a similar development, with an increase in animals from the late 1970's and a peak between 1989 -1991. After 1991 the trend has been a steady reduction of the herds. The reduction in the number of animals is partly due to a instruction from the national authorities, partly the influence of predators, and partly an understanding from the owners that the number of animals in 1989 was not on a sustainable level.

Sale of reindeer meat is the most important income for the reindeer owners. In addition, there is income from compensation of loss of reindeer, salary, pension, handy craft (duodji) and additional earnings. The average income of a reindeer owner is lower than the average personal income among other groups of the society.

The main costs in the reindeer industry are connected to mechanical equipment, transport and constructions, snow mobiles, motorbikes, cars, helicopters etc. These are capital intensive tools for the reindeer owner, but also important in the daily work in order to be able to keep up with the herd. Due to an

increase in infrastructure, which makes the migration between pastures more difficult more owners choose to move the reindeer by car. This makes the migration easier, it saves the animals' energy, but it means extra cost for the owner. In some areas, this is almost the only possibility to get the reindeer from one pasture to another.

Loss of pasture is one of the main threats to the reindeer industry in the future, according to most of the reindeer owners and herders interviewed in this project. This viewpoint is also supported by "GLOBIO – Global methodology for mapping Human Impacts on the Biosphere" which shows explicitly the impact on the pasture areas during the last 60 years, especially for Norway, but also for the northern part of Sweden, Finland and northern part of Russia. The report emphasises that the impact from infrastructure development on reindeer and caribou threatens the cultural traditions of arctic indigenous people and their way of life.

Predators are a major concern to the reindeer industry in Scandinavia, and according to the interviews, this problem is growing. This view is supported by the official statistics in these countries. The number of the different predators - lynx, wolverine, wolf, bear and eagle - is increasing.

The situation in Finland is most dramatic. According to the official statistics between 1987 and 2000 there has been an increase of 23% of the wolf population, a 89% increase in the bear population, 40% increase of the lynx population and a 109% increase of the wolverine population. The number of reindeer killed by wolf increased by 90%, for bear it was an increase of 300%, for lynx an increase of 26%, and for wolverine an increase of 1.708% in this period.

The compensation system in Sweden for loss of reindeer to predators is based on the occurrence of different predators inside one pasture area. The compensation is based on the estimated reproduction of each predator every year, and is paid independent of the number of reindeer found killed by predators.

Disturbance from small game hunting, especially with dogs, is according to reindeer owners in Scandinavia as an increasing problem. In a situation where the pasture land is decreasing, or an efficient use of the pasture is complicated by the development of infrastructure, an increase of relatively small disturbances, for instance from small game hunting, could have significant effect on the herd.

In the mid 1990's there was a change in the Swedish legislation in connection with small game hunting. Before 1993 the local Saami village could sell the game



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licences and decide the maximum number of hunters a day on their pasture areas. This situation gave the Saami villages an opportunity to inform the hunters where the reindeer were and to avoid these areas. After the changes in the legislation anybody can buy a game licence in the local shop without any information about the reindeer husbandry and there is no limit to the number of hunters. One consequence is an increased problem with disturbances of the herds, resulting in a lot of work to keep the herds together.

The reindeer market in Scandinavia are favorable. Reindeer meat is well received in the national markets in Scandinavia, and is perceived as healthy and clean arctic food. The price of reindeer meat is much higher than for other comparable meat products. At the same time, the reindeer owners are mainly primary producer of meat, and there is a potential for value-adding production.

There is a extensive work concerning the legislation in the Scandinavian countries. At present, three important reports - one Norwegian, one Swedish and one Norwegian-Swedish - are on public inquiry. This is the Norwegian report "Proposal for an amendment to the Norwegian Reindeer Herding Act" (NOU 2001:35), the Swedish "A New Reindeer Management Policy" (SOU 2001:101) and "Recommendations from the Norwegian-Swedish reindeer pasture commission". All reports are expected to have impact on the management system in both countries. In addition, the public debates about a future ratification of the ILO Convention no. 169 is continuing in Sweden and Finland. Norway ratified the ILO Convention, no. 169 in 1990.

Based on the background information collected for this project, we would make the following recommendations:

- The situation with loss of pasture connected to infrastructure development is a major threat to the reindeer industries of Norway, Sweden and Finland. A joint effort between national authorities and the reindeer industry is needed to secure the remaining pasture areas.
- The loss of access to pastures in the Southern Saami area in Sweden and Norway is an on-going dispute in the court system between reindeer owners and private landowners. This situation calls upon immediate attention from the national governments.
- Predators are a growing concern to the industry. Norway and Finland should look closer into the compensation system of Sweden, which is based on the occurrence of different predators inside one pasture area. The compensation systems must be based on a fixed price on each reindeer.
- The Saami reindeer husbandry is based on the family as a social and economic unit. The development during the last 30 years has reduced the family members' rights and, as a consequence, their involvement in the industry. It is important to strenghten the position of the family through a familij-based reindeer husbandry, and reverse the development of the reindeer industry into a special branch of agriculture.
- The positive development of value-adding production must continue in all countries. The reindeer meat is a highly valued product, and the opportunities within the domestic markets are favourable.
- To increase the value-adding production the information about the rules and regulations connected to meat production and the start-up of small scale productions must be made more easily accessible for the industry and the local governments.
- Sweden and Finland are encouraged to intensify the work towards a ratification of the ILO Convention no. 169.