# Sustainable Reindeer Husbandry

# Background

Reindeer husbandry is an economic activity in the Arctic which has a particular cultural dimension and which is of utmost importance to the indigenous peoples. About 60.000 people, including 20-25 different groups of indigenous people are employed in reindeer husbandry. The total number of domesticated reindeer in the region is about 2 million. Reindeer husbandry is suffering a decline both in Russia and in Scandinavia. In Russia the reasons for the decline are mainly economic. In Scandinavia there are problems in certain areas due to the overexploitation of pasture land and certain key species of lichens.

As part of a Norwegian initiative to focus on basic economic sectors in the Arctic, a workshop was held on sustainable reindeer husbandry in Kautokeino, Norway, on 8-11 March 2000. The workshop identified a number of challenges, which illustrate the current situation:

- Lack of infrastructure hampers economic development
- In certain areas industrial development, disturbance by traffic and pollution have resulted in loss of traditional pasture land
- There is a need for legal protection of reindeer herding rights and pasture land
- An increase in the number of predators and changes in wild reindeer migration have negative impacts on reindeer husbandry
- In some areas the number of animals needs to be adjusted to the carrying capacity of the pasture land

## Project goal

The goal of the project is to assess circumpolar reindeer herding and husbandry in relation to ecological, economic and social/cultural sustainability. This will be done by carrying out a thematic survey and assessment of reindeer husbandry in the region, with reference to management of pasture land, internal organization and socio-economic conditions in reindeer husbandry.

#### **Relevance and importance**

Reindeer husbandry is a special way of using renewable natural resources, and reindeer husbandry is facing specific challenges with regard to sustainability. Governments are committed to recognizing the land areas of indigenous peoples and to recognizing that these land areas should be protected and secured against any industrial activities or other use that the indigenous people themselves regard as inappropriate or undesirable.

Reindeer husbandry builds on traditions that practically can be defined as of sustainable use of natural resources. This means that the natural resource base and the environment on which reindeer husbandry depends must be protected. The stock must be adjusted to the existing pasture land and the production surplus must be utilized in a sustainable, economic way. However, many regions are now facing problems and in some of these regions reindeer husbandry has reached a level where outside help is required if the industry is to survive.

There are many similarities in the ways in which Arctic reindeer herders organize themselves socially. The predominant form of organization is through kinship and flexible organization in herding communities *(siida)* involving a large degree of individual autonomy and situational leadership. At the international reindeer herding workshop in Kautokeino, reindeer herders pointed out that data for the reindeer industry is scarce and difficult to acquire. Many addressed the need for comparative analysis as a means of exchanging knowledge and experience among Arctic reindeer herders.

In Russia, which has by far the largest share of the pasture land (87%) and about 67% of all the reindeer, development is hampered by the lack of infrastructure such as transportation, abattoirs, processing facilities and markets. In Scandinavia significant overgrazing has been documented in certain areas by means of remote satellite monitoring and *in situ* measurements. In some areas there has been a loss of traditional land due to the impact of industrialization.

## Significant to Arctic residents

Reindeer herding takes place across borders and among indigenous peoples who represent different cultures and traditions. There is a need to develop the industry in order to benefit the people involved. This can be done both by improving technology and infrastructure and by the exchange of knowledge and skills in reindeer herding.

Reindeer husbandry is an economic and cultural activity which involves many people directly and indirectly. If economic and social prosperity and well-being are to be achieved for Arctic residents, reindeer husbandry will have to be one of the economic and cultural pillars of the future.

#### **Related activities**

The Association of World Reindeer Herders (WRH) is an organization for reindeer herders throughout the Arctic region. A project on Sustainable Reindeer Herding must take due account of the investments made by this organization in terms of network building and documentation of the situation within the industry. The project will be carried out in close cooperation with the Association.

There are a number of ongoing projects on reindeer husbandry which involve Arctic regions. Canada has initiated a two-year project to create a dialogue between Canadian First Nations and Siberian Evenki, Sakha and Dolgan Nations. Canada wants to share the experience it has gained in "co-management" of wild migratory reindeer, processing of wild and domestic reindeer meat, marketing of reindeer products and experience with community development corporations.

Finland (Lapland) is coordinating a Northern Forum project on Reindeer Management. The project was initiated in 1997 between Lapland and the Sakha Republic. The general aim of the project is to determine which reindeer management methods, research findings and training techniques would be appropriate for Russian reindeer husbandry. The current work plan

includes collaboration between Lapland, Yamal-Nenets, the Komi Republic and the Sakha Republic on, for example, veterinary issues, education, technology in herding, processing etc.

In IASC a project is organized on Sustainable Development – Caribou/Reindeer Grazing Systems.

## Project structure

## Activities

The project will be interdisciplinary in structure, with the emphasis on economics and social science. The main elements of the project are to:

- 1. Describe and review the present situation with regard to pasture land, nutritional requirements, internal organizing, and economic and social conditions in reindeer husbandry. The analysis should be based on a common set of indicators.
- 2. Describe and analyze management principles, mechanisms and elements in reindeer husbandry. Review and analyze current legal status.

The project will help to:

- Improve the databases and scientific knowledge in circumpolar reindeer husbandry,
- Identify problems and shortcomings in reindeer husbandry taken due account to the cultural variety and adaptation to the natural resource base, and
- Identify areas of action and the need for follow up.

Based on available information, the project will make recommendations for further action for implementation and follow up at the national level and for further joint activities at the international level.

## Participation

The project will require the participation of Arctic countries such as Russia, Finland, Sweden and Norway, as well as the Association of World Reindeer Herders. While not all countries would need to take part, the benefits would increase with each additional participant. The project will also be relevant for countries where reindeer husbandry plays a minor part, such as Greenland, Canada and USA (Alaska).

Two Norwegian research institutes have been identified as possible participants. These are:

- Nordic Sami Institute, Kautokeino, Norway
- Center for Sami Studies, University of Tromsø, Norway

A Russian institution will be identified through further contacts as a key participant in the project.

## **Relationship with other Arctic Council Programs**

Wild and domestic reindeer are impacted by pollution, habitat degradation and climatic change. Among Arctic fauna, reindeer are a key species and can in many circumstances be considered as an environmental indicator. The work of the CAFF on Arctic fauna and the new project under the AMAP: "Arctic Climate Impact Assessment" are relevant in this regard.

#### Anticipated outcome

A review and documentation of circumpolar reindeer husbandry will increase the focus on reindeer husbandry as an economic and social basis for Arctic indigenous people. The project should be seen as a first step towards a discussion on reindeer husbandry within the Arctic Council.

The project will make for a better understanding of the industry's needs and of how to meet future challenges. The project will identify areas for action and the need for international cooperation.

The project will involve reindeer herders who represent different groups of indigenous peoples and will thus facilitate the exchange of traditional knowledge and assist in building networks etc.

The results will be made public and available/distributed to members, permanent participants and observers of the Arctic Council, as well as reindeer herders, educational institutions etc.

### Funding

Norway will provide funds to cover expenses identified in the budget, including contracts with Norwegian and Russian scientists and experts. If other countries, permanent participants or observers wish to take part in the project, more funding will be needed.

#### **Ethical considerations**

The project will be carried out pursuant to the ethical guidelines which have been developed for Arctic research.

#### **Environmental impact**

The project will have no direct or substantial environmental impact.