

Extended summary

Introduction

The Nenets Autonomous Okrug (NAO) in northwestern Russia is home to approximately 8000 Nenets and 3000 Izhma-Komi indigenous people. Many of them depend directly or indirectly on reindeer husbandry, fishing and hunting for their livelihood. In the past, reindeer pastures covered almost all of the territory. Now, however, large tracts of land have been degraded by oil prospecting and production or have become difficult to access across oil pipelines. Lakes and rivers are increasingly polluted.

It is important to realise that environmental map data in Russia are available to the public only to a very limited extent. Further, a complete overview is lacking, and the situation changes quickly. A continually maintained map database would be an indispensable tool to track development.

The project MODIL-NAO is a collaboration between the Norwegian Polar Institute and the Association of Nenets People Yasavey. The principal objective is to give the indigenous population of the NAO a tool – a GIS map database – to promote their interests in an area of intensive industrial development.

A major source of data for the project is a questionnaire campaign directed towards traditional land users, mainly reindeer herders. Topics include all spheres of their living, their traditional occupations, their socioeconomic situation, and the condition of their natural environment. Satellite images in GoogleEarth were used to monitor visible, physical damage of the tundra. These data are combined with various publicly available data in a bilingual (Russian and English) GIS database.

This project report is published in English and Russian.

The situation for traditional modes of livelihood

Reindeer husbandry is the most prominent traditional occupation in the NAO. Most herders move from their settlements close to the winter pastures in the forest tundra belt northward to the summer pastures in the barren tundra. Most of them are settled and semi-nomads working in brigades of cooperatives or as private reindeer herders. Lately a number of clan communities (*rodovye obshchiny*) have been formed, mainly in the village Nelmin Nos. The indigenous people participate both in subsistence and commercial fishing. Fishing provides a subsidiary occupation for reindeer herders, as well as other traditional subsistence activities like hunting and gathering.

Several reindeer herding cooperatives also have fishing and hunting brigades, while a minor number of cooperatives have mainly specialised in fishing.

The unemployment rate (registered people without a monetary income) among indigenous people is high. Individuals with more advanced education often leave the area. Life expectancy is extremely low – 40-45 years – because of poor access to medical care and alcohol abuse. These and other factors go hand in hand with a general degradation of indigenous society.

Oil development in the tundra exacerbates the problem. An uncontrolled situation has developed around oil and gas exploitation in many parts of the NAO, where some oil companies are accused for grave violations of ecological standards and Russian legislation. Numerous oil spills and other degradations of the upper soil layers occur periodically in the tundra, inflicting damage on the Arctic natural environment, which is the basis for the livelihood of the indigenous people.

Since the Russian socio-economic crisis of the 1990s herds have been rebuilt and stock numbers seem to have flattened out at a level around 150,000-160,000 reindeer. The overall productivity is still rising. There is no direct relation between oil development in an area and the economic well-being of the reindeer herding enterprise using the same area. State subsidies and support programmes for reindeer husbandry at the regional and federal level have certainly been a major reason for the overall recovery of reindeer husbandry after 2000. Additionally, oil companies also pay compensation for ceded pasture lands, but there are no statistics about this: such compensations are based on a variety of individual, often confidential, agreements.

Juridical situation and traditional land use management

Three federal laws are completely devoted to the rights of indigenous peoples. Laws supporting indigenous peoples' rights have a general declarative character and do not specify the duties of the non-indigenous resource extractors – such as oil or gas companies - to preserve these rights.

According to NAO legislation, persons working in reindeer husbandry and their authorised representatives have the right to request ecological and ethnological impact assessments of activities potentially infringing the interests of reindeer husbandry and

other traditional occupations and to participate in carrying out such impact assessments.

The basic mechanism of environmental protection which was used in Russia until 1 January 2007 was the State Environmental Assessment (SEA). Practically of all kinds of economic activities were subject to SEA. After a legislative modification from 1 January 2007, only the extent to which the documentation of the planned industrial project conforms with environmental requirements must be assessed. However, technical regulations pertaining to environmental protection are absent. There is a certain danger that proper environmental assessments will not be carried out at all.

There are no laws regarding ethnological assessments, although such assessment processes have been carried out in some places of the Russian Federation.

Indigenous peoples' participation in decision-making regarding how hydrocarbon projects are carried out is possible at several stages of a project, for instance, through referenda, coordination meetings, Public Environmental Assessments and – if carried out – State Environmental Assessments.

According to the previous version of the Land Code indigenous peoples engaged in traditional economic activities were entitled to use the land, i.e. reindeer pastures, for free and unconditionally. As of 2001 reindeer pastures can be leased to companies by the state if traditional land users are compensated. Although traditional land users are supposed to play a role in leasing decisions, how "voluntary" this is in reality is open to question.

It is also noteworthy that reindeer herders only receive compensation for the calculated loss of reindeer pastures and reindeer. There is no compensation for losing fishing, hunting and gathering resources, which contribute substantially to reindeer herders' subsistence economy.

Federal and NAO legislation open for the formal establishment of Territories for Traditional Nature Use (TTNU). Today, eight out of 22 agricultural production cooperatives have established TTNUs at a regional level. These lie within lands already allocated to reindeer husbandry and other traditional occupations already during Soviet times. Unfortunately, the regulations for such territories lack provisions on how to manage them. However, they include provisions stating that the natural resources within such territories shall be managed and their monitoring carried out by Northern indigenous communities or organisations representing them. This includes monitoring compliance with the main requirements of environmental and land manage-

ment legislation applicable to the land use for economic purposes. Allocation or withdrawal of land for purposes other than traditional economic activities shall be agreed upon with local self-government bodies or determined through local referendum.

In light of this legislation it is noteworthy that not all the companies make agreements with reindeer herders. Only three companies have agreements with reindeer herders that cover the entire period of their license agreements. Most agreements with herders are only valid for 1-2 years, whereas the company's license is for a longer period. Many agreements are confidential and cannot be evaluated by public opinion, neither can it be ascertained that the indigenous contract partners fully understand the consequences of the agreement they sign. There is no mechanism for the investigation of reindeer herders' opinions on land allocation issues and oil companies' operations.

One of the challenges in efficient management of traditional nature use lands is the lack of up-to-date land use plans for traditional activities. Other challenges are the lack of proper management of TTNUs and ambiguity regarding which government authority is responsible for this, the lack of compulsory assessment of industrial projects' impact on the traditional lands and lifestyle of the indigenous people and the absence of a common forum in the Okrug where representatives of government authorities, industrial companies and indigenous peoples could negotiate and make common decisions to achieve a balance of interests of all stakeholders.

Oil-and-gas development in relation to indigenous peoples in the NAO

Prospecting for hydrocarbons in the NAO began in the 1960s. The real oil boom in the area started in the 1990s, in the Bolshezemelskaya Tundra, the Pechora River delta and, to a minor extent, on Kolguev Island. The main regions of oil production are Khar'yaga with large surrounding areas in the southern Bolshezemelskaya Tundra, and Varandey and Yuzhno-Khylchuyu in the northern Bolshezemelskaya Tundra. Pipelines connect these areas, or are planned to be built. Oil is exported by pipeline southward, and by ship from the terminal of Varandey. There is a minor terminal for local export on Kolguev Island. Another large terminal is planned at the village of Indiga. The maps in Part 2 of this report show the situation.

To meet environmental standards in the rapidly developing hydrocarbon resource area is a challenge. Pollution of the Pechora River started in the 1950s, mainly from the early prospecting in the upper part

of the river, in the Komi Republic. Spill water dumped into the river, as well as oil spills, affect fish species. Most of the drinking water of the NAO comes from the Pechora River. The main problematic, persistent pollutants are arsenic and mercury, which are derived from industry in the Komi Republic. Some licenses have been withdrawn. There is also a high pressure on reindeer pastures. Pastures with sufficient quality of lichen for the reindeer have been reduced by almost 20% from 1984 to 2002.

It was not possible to discover whether the issued licenses for hydrocarbon development are based on positive decisions of the State Environmental Assessment Committee or not. Most of the license agreements have been found to comply poorly with legal requirements to consider NAO's indigenous peoples' rights. Only few of them contain the subsoil resource user's responsibility to make agreements with indigenous peoples. In most instances it is up to the license holders whether to enter into such agreements or contracts with the representatives of indigenous peoples. Only one out of 38 analysed agreements stipulates license holder's liability to compensate for losses as a result of resource development operations as demanded by legislation. The analysis of license agreements also revealed a negative trend. Most of the license agreements, which to various extents stipulate subsoil users' liability to observe the rights of indigenous peoples, were concluded in 2001-2003, while those recently made (2008-2009) do not provide for such liability.

License agreements oblige license holders to ensure soil recultivation in the areas damaged because of natural resources development, as well as to comply with other environmental protection requirements. At the same time, as reality shows, the environmental protection requirements are not being observed by all license holders. This situation violates the rights of NAO's indigenous peoples to protection of their original environment and traditional way of life.

It is widely understood that unlawful conditions prevail in connection with many oil installations. Some facilities, especially older ones, are built according to low safety standards and frequently experience minor failures. Unfortunately, there is a tendency among many companies to withhold information on environmental damage like minor leakages and pollution discharges. The relevant government agencies have no practical possibility or sufficient funding to really control pollution, although they know well the real situation.

The basic method applied to protect nature is the development of a framework of protected areas. But even if the borders are not touched, polluted waters do not stop at their boundaries. Eighty percent of the

land east of the Pechora River is estimated to be degraded if pollution restrictions are not intensified.

All land assigned to reindeer husbandry is state land. The extent of reindeer pastures has decreased from 90 % to 73 % of the NAO. The remaining land has changed its status through negotiations. Negotiations for agreements regarding compensation for lost land are the only way of influencing the development. Despite certain legal guarantees, indigenous people have no opportunity to change major, politically approved decisions. It is also questioned if the establishment of TTNU's has any practical effect, as now many major oil development areas are within TTNU's.

There are numerous examples of good relations at the local level between companies and reindeer herders. Companies often assist with helicopter transportation of people and goods between city, villages and pastures.

Indigenous people in general have a large capacity to adapt to environmental changes, for instance, through selecting the grazing areas which are most suitable under the actual circumstances at any time. But alternative areas are getting fewer and smaller, while increasing portions of the land become useless for traditional occupations.

The questionnaire survey and its results

Reindeer herders and other villagers from six areas within the NAO were interviewed about diverse spheres of their lives, their traditional occupations, their socioeconomic situation, and the condition of their natural environment. Information about land use was drawn on maps. The respondents were mostly interviewed by co-villagers who were trained for this purpose at seminars in the okrug capital Naryan-Mar. The six study areas (Kanin Peninsula, Kolguev Island, the villages of Indiga, Nelmin Nos, Krasnoe and Khorey-Ver) cover areas of absent, moderate and strong physical impact from oil-related activities.

The analysis showed that many respondents are engaged in traditional economic activities and such activities have decreased only slightly from the last generation to the present one. For people engaged in traditional economies, related activities account for 65-100 % of their total work. For most areas, the traditional food proportions of their diet is estimated to 61-83 %. Of the traditional foodstuffs consumed by reindeer herders' (which were the majority of the interviewed people) 40-70 % are reindeer products, while fish, wild game and wild plants make up 10-25 %, each.

There is a huge difference in the annual income of active reindeer herders (200 000 - 600 000 RUR) and people involved in other traditional activities (30 000 - 50 000 RUR). Respondents usually underestimated the monetary value of the contribution of traditional foodstuffs they consume, which may have an annual average value of 65 000 RUR – not taking into account other traditional products like skin and fur clothes.

The high consumption of traditional food indicates a high degree of indigenous people's vulnerability in the event of the failure of their traditional sources of subsistence. They are vulnerable to degraded pastures, hunting and fishing areas, and territories for gathering wild plants due to industrial development on the land.

Special circumstances occur in the responses from one village, Nelmin Nos, where the contribution of traditional foodstuffs to the diet is very low. At the same time, they have a very low average income and cannot afford to buy much food. Their diet appears to be nutritionally inadequate. There is no oil development in the area today. The reason can probably be found in a combination of two factors: One is mismanagement - the reindeer herd has decreased from 12 000 to 4200 head since 1998, mainly during the phase of restructuring of the cooperative before 2001. The cooperative has since dissolved into many clan communities. The other is the proximity to the okrug capital, Naryan-Mar, which has resulted in lawful and unlawful exploitation of the natural resources (including extensive poaching) by outsiders.

Three of the six study areas, Krasnoe, Khorey-Ver and Kolguev Island, have experienced oil development. All respondents from Krasnoe noted the negative effect of oil production, mainly pointing at the pollution of lakes, rivers and pastures. At the same time, some of them noted that their living conditions have improved (construction of houses, roads, assistance for transportation). Respondents from Krasnoe take advantage of the proximity of their settlement to the main market of traditional products in Naryan-Mar.

Those respondents from Kolguev having their herds on the oil development side of the island noted negative environmental effects.

Most respondents from Khorey-Ver stated that oil development has improved their living conditions and even the conditions for reindeer husbandry. The oil development opened up opportunities for new foodstuffs, for the use of helicopters for transportation, and hopes for compensation. They are successful reindeer herders with high incomes and were not interested in discussing the state of the environment.

Khorey-Ver was considered important for the project because the major facilities of the Kharyaga oilfield and adjacent fields, including a major pipeline system, divide the winter pastures of the reindeer herding cooperative into two. Nevertheless, respondents noted that there were almost no constructions on their routes. Although it was not revealed from the interviews, it seems that reindeer herders have ceased using their pastures on the southwestern side of the Kharyaga pipeline, and herds are concentrated to the east of it in winter.

Respondents from Indiga and the Kanin Peninsula, who today live far from oil-related activities, are generally afraid of any future industrial development in their area, which they think would degrade the environment. An oil terminal with a connecting pipeline is planned at Indiga.

A common theme among respondents concerning the issue of who determines the future of their family or community is that they have to rely on themselves. They obviously avoided blaming others. Still, when asking about threats towards their livelihood, they named ecological threats connected with oil production like the degradation of pastures, water quality and berry fields and the reduction of wild animal stocks. In addition, they referred to threats like poaching and the many homeless dogs that are left by newcomers. Main threats in places unaffected by oil industry are considered to be unemployment, alcoholism and distant educational facilities.

Almost all respondents said that they do not see their individual participation in a future arrangement. They did not show a determination to change of their subsistence pattern or look for alternative ways of supporting themselves. At the same time, their responses to the questionnaire made clear their high level of dependency on traditional subsistence activities. This indicates that if these subsistence activities are negatively affected it will have serious consequences on their welfare.

Concerning the attitude of oil companies towards indigenous peoples, the interviews revealed that companies formally comply with the requirements of public discussions and agreements with indigenous communities, although there is no fixed procedure for these discussions. Such procedures should aim at minimizing negative impacts and at facilitating the cooperative monitoring of industrial projects to ensure they comply with agreements and environmental regulations.

Recommendations to stake-holders

A list of recommendations to stake-holders based on the output of the project is provided in Chapter 1.6.2.

The GIS database

The GIS database, in addition to the present report, is the main outcome of the MODIL-NAO project. The database is published on the Internet using a GoogleEarth-based system that does not require special skills or software for the users. Information about how to access the database will be provided on the project website <http://npolar.no/ipy-nenets> and Yasavey's website <http://www.yasavey.org>.

It is hoped that the database will be used by the indigenous people to make informed decisions about their future, to discuss land use plans with government authorities, to negotiate compensations, and so on. It is also hoped that the representatives of the Nenets people will have the resources to maintain and further develop the database in the future.

Key findings

- 1) Difficulties that affect reindeer herding units, apart from deterioration and reduction of the pasture areas, include such social factors like poor management, the loss of prestige in reindeer husbandry as a livelihood, loss of traditional knowledge, a significant change of values in the Nenets society, social apathy, unemployment, and, in connection with the latter, the abuse of alcohol.
- 2) There are frequent complaints by local populations regarding oil companies and their responsibility towards pollution of pastures, illegal waste disposal, pollution of water resources, decrease of fish stocks, poaching by oil workers and others, and attacks by stray dogs on domestic reindeer.
- 3) In areas where future oil development is expected, people are afraid of its negative influence on traditional land use. In areas where oil development has been a reality for some time, people noticed this negative influence but simultaneously saw an improvement of the economic situation due to investments by oil companies into the system of social security.
- 4) Traditional land users have little to no influence over the most of the development of oil and gas installations, apart from providing minor technical recommendations.
- 5) The high consumption of traditional food among traditional land users indicates a high degree of indigenous people's vulnerability in the event of reduced or eliminated traditional sources of subsistence. The permanent replacement of traditional food by market food will seriously affect the health and the general wellbeing of the indigenous population.
- 6) Environmental regulations are not satisfactory, as there are no effective mechanisms of control. A severe deficiency is the lack of control over the use and misuse of the environment; companies unlawfully use tracked vehicles on summer pastures, pollute lakes and rivers, etc.
- 7) Only a few companies fulfill their legal obligations towards indigenous peoples; in recent years' the trend shows that such liabilities are no longer included in the license agreements.