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SYSTEM FOR THE ARCTIC

WP4.1.4: SOCIAL IMPACT

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DELIVERABLE SUMMARY SHEET

Short Description
<p>The social impact assessment (SIA) has been carried out on the basis of the ARCOP project work package content analyses, literature on SIAs, the regional mass-media materials relating to oil marine transportation and multiple field data. Comparative and participatory approach methods were used during the assessment, including interviews with public and local experts, questionnaire surveys conducted by local representatives and group consultations. The report presents a picture of the past and present situation in the area of the proposed oil marine transportation system. An overall assessment of possible impacts of the oil transportation was made with special attention to the needs of indigenous peoples, as the most vulnerable group of society. The conclusion discussed the future perspectives related to the social impact assessment of marine transportation and associated infrastructures on Arctic Russian communities.</p>

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Abbreviations and Acronyms

ARCOP	Arctic Operational Platform
EBRD	European Bank for Reconstruction and Development
EU	European Union
IAIA	Association for Impact Assessment
Koophoz	Cooperative household
NAD	Nenets autonomous district
Nenets AD	Nenets autonomous district
NEPA	National Environmental Policy Act
Oil&Gas	Oil and Gas
RAIPON	Russian Association of the Indigenous Peoples of the North
RF	Russian Federation
SIA	Social Impact Assessment

Key words

Social impact Assessment, Nenets autonomous district, Nenets people, traditional subsistence, oil marine transportation system, ecology, community well-being

Note

In accordance with accepted norms, in this report the word **Nenets** is adopted for both singular and plural, individual and society, noun and adjective (in Russian “Nenets” is used for male singular form, “Nentsy” for plural and “Nenetsky” for adjective. In the Nenets language, a person’s self-designation is *n'enyts*, plural *n'enytsja*).

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Summary

The deliverables D 4.1.4.1; D 4.1.4.2; D 4.1.4.3 constitute the immanent part of the Social Impact Assessment report which was developed within WP 4 of the ARCOP project. The future perspectives related to social impacts assessment of marine transportation and associated structures on Arctic Russian communities could be understood only on the basis of multilateral analysis of the past and present situation in the area of the proposed activity. Such survey was accomplished only with tight involvement of the local communities whose point of view is presented at the text of the report. The summary of deliverables D 4.1.4.1; D 4.1.4.2; D 4.1.4.3 are presented below.

D 4.1.4.1. Statement of the social impact assessment of the oil marine Arctic transportation*Goals and Objectives*

The objective of the report is to carry out overview studies focusing on assessing the potential socio-cultural impacts of oil marine transportation on indigenous peoples and local communities in Nenets Autonomous District. In this context, the goals of the social impact assessment study were:

- 1) To determine the group of peoples that could fall under the impact of the oil marine transportation system.
- 2) On the basis of a comparative study, to predict possible direct, indirect and cumulative impacts of the proposed activity in the short and long-term.
- 3) To highlight the needs and priorities of local peoples that need to be considered before and during industrial implementation and to define possible mitigating measures.

Sources and methods of assessment:

The social impact assessment (SIA) was carried out using a comparative method on the basis of the analysis of multiplied data (interviews, questionnaires, statistical and archival material, regional mass-media press concerning oil transportation) that provided insights for the current socio-economic situation in the area. Among other reliable data it was analysed the influence of the Northern Sea

Route on social and cultural development of indigenous peoples as reported by the INSROP project.

While the interpretation of the assessment findings, it is essential to recognize that different groups of society have widely differing worldviews, level of life and possibilities to present their point of view. There may be varying benefits of the project for almost all involved parties; SIA *has a special duty to identify those whose adverse impacts might get lost in the aggregate benefits*. The social impact assessment must analyze and evaluate using suitable methods the possible impacts on the local peoples *with special attention to the most vulnerable groups of the society*. To achieve this the SIA methodology must be based on a combination of three approaches: technical, consultative and participatory. Such methodologies will give opportunities:

- i) To provide a conceptual framework together with rigorous, measurable data on those aspects of the analysis that can be quantified;
- ii) Record input from those affected by the proposal – documenting their experiences, values, needs, priorities etc;
- iii) Involve the affected community in setting the boundaries of enquiry, defining impact measures and indicators, and identifying appropriate responses to anticipated effects.

Main findings

Oil transportation is considerably important for development of the oil extraction industry in Russia. The oil industry has a rapid pace of development in the Nenets Autonomous District and currently it is playing a leading role in providing a regional income. At the same time, other sectors of the economy presented by reindeer herding, fishing, hunting and gathering have a considerable significance for the employment of the rural population of the Nenets AD, especially for Nenets people. Traditional occupations constitute not only the basis of their daily subsistence, but are also a core of their cultural identity.

Development of the oil marine transportation will bring changes to the life of local and indigenous peoples. The balance between positive and negative impacts will depend from number of factors, among others: ecological safety of oil loading and transportation, environmental and social policy of the companies that are

involved to oil marine transportation system and the attitude of the regional administration.

In the Nenets Autonomous District, the positive impact from the oil marine transportation is connected with the future increase of oil extraction and its result in swelling revenue for the local budget. It is expected:

- that transportation and general infrastructure will be developing;
- that there will be jobs for the local population;
- that social well being of local peoples will be improved.

These positive changes are very welcomed by the inhabitants of the NAD, but to optimise the benefits from the oil transportation, additional measures and social programmes are required. Currently in NAD intensification of transportation is mostly connected with construction work at the terminal and doesn't support needs of the isolated rural inhabitants. To promote the job opportunities specially oriented training programmers are essential especially with purpose to support local youth and indigenous peoples. Nowadays in Nenets autonomous district companies often invite seasonal workers for the oil and construction industries from other region of Russia and even from other countries. The report presents the examples of positive impact of the oil industry activity in Nenets AD with discussion about possibilities to increase benefits for all interested parties. It was paid attention to different expectations of urban and isolated rural population.

Along with potential benefits from industrial development and the oil marine transportation, there are potentially negative changes that would impact on the life of local communities. It is important to pay sufficient attention to this fact. There are some expectations that negative consequences will derive from

- i) Sea activity (shipping)
- ii) Activity in the coastal area (different stages of terminal construction and operation).

Fishing plays very important role in daily subsistence of all rural population of Nenets AD. The locals' are concerned about the impact of active marine transportation on fishing resources but for the more precise determination for future consequences, the local inhabitants need to be provided with more detailed

information about any possible changes in fish diversity and fish stocks that may occur as a result of crude oil transportation.

Currently in the Nenets Autonomous District, the negative impact of the oil marine transportation is associated very much by indigenous peoples with industrial operations in the coastal area, that because the impacts of this activity are the most perceptible and visible. The area of the coastal terminal is at the hub of the conflicting interests of different land users. It is important for the project planners to consider the fact that in the Nenets AD, the coastal territories that might be under the direct impact of the integrated oil marine transportation system are recognised by regional law as “*territories of traditional land use*” (for example, the territory within the Varandey terminal is permanently leased to the cooperative farm of private Nenets reindeer herders of the Koophoz “*Erv*”). The regional law prioritises traditional forms of land management in this territory, which means that all industrial operations should be carried out with the consent of communities of indigenous peoples of the North or their representatives. The report presents examples of past and current industrial activity connected with oil marine transportation in the coastal area. It shows that the allotment of the coastal land could cause a chain of different (direct, indirect, cumulative) negative consequences for Nenets private reindeer herders. Meantime additional possibility for local trade and transportation could bring benefits for all interested stakeholders.

The report highlights the needs of local stakeholders and presents mitigation measures. One of the important findings of the SIA was that some negative impacts could be avoided by

- 1) Early and permanent consultation with the primary land tenants;
- 2) Strict adherence to existing federal and regional laws and regulations.

If the future activity related to oil marine transportation proceeds in a manner that fully considers environmental implications and with time for consultation with local peoples, then the benefits for the indigenous communities will be considerably more effective.

The social impact assessment report concludes that impacts of the oil marine transportation in the Arctic on the local communities will depend on the following factors:

- 1) The chosen scenario and environmental safety of shipping;
- 2) The consequences of coastal activity;
- 3) Social policy and the distribution of benefits;
- 4) Public involvement into the planning process which should be truly interactive, with communication flowing both ways between the agency and affected groups.

The International community of project planners, policy makers, scientists and public figures are called to develop international and local capability to anticipate, plan and manage the consequences of project implementation to enhance the quality of life for all groups of the society. This will contribute to promoting and establishing of mutual trust and understanding in the Arctic region.

D 4.1.4.2. Consideration of participatory approach of EIA

Nowadays social impact assessment in many countries is an integral part of the ecological impact assessment survey and provides more understanding of multilateral consequences of planned projects and programs. The social impact assessments must accurately and comprehensively document the negative and positive implications of a proposed change for individuals, groups and communities of multi stratum society with special concern to the groups that experience the most negative impact and have the less power to express their issue.

Consultation has been always one of the basic methods used during fieldwork, that provides means to identify interested stakeholders, their issues, concerns, needs, ideas and values as well as helps find out areas of mutual interests and potential activities of both parties: local communities and companies. During this assessment contacts with the Association of the indigenous peoples of the Nenets Autonomous Area “Yasavey”, with the Russian Association of Indigenous Peoples of the North (RAIPON), with members of reindeer herders community and representatives of the NAD Administration have been established. Main statements of the fieldwork were discussed with representatives of the regional Association of the indigenous peoples of the Nenets Autonomous District “Yasavey”. The members of indigenous communities in Indiga and Krasnoe villages of Nenets AD accomplished the questionnaire design. Besides consultation further implementation

of the participatory approach is essential task of the social impact assessment. For this additional funding may be needed in future to enable for representatives and leaders of the potentially affected groups and communities to participate in international public meetings, to present their vision of the project future, to define the problem and identify possible solutions. The experience of hearing people speak directly about the impact of ‘development’ on their lives is not only valuable in its own right, but also aids in understanding of the subsequent SIA reports and contribute to the open dialog between interested parties of the project.

Researchers on SIA defined several essential ingredients of a successful implementation of participatory approach.¹ These ingredients are:

1. Flexibility. It is important to be responsive to the needs of participants in the process.
2. Support from the decision-makers. This includes a willingness by the proponent (be it government or a developer) to disclose all relevant information to affected stakeholders.
3. A skilled SIA practitioner
4. Adequate funding and timing

Public involvement and social impact assessment needs to be a continuous process beginning with the planning phase and continuing through construction and decommission. There should be active feedback between the affected communities and planners throughout the assessment and planning processes. These processes should be carefully coordinated so that planners can be apprised of potential problems and opportunities before it is too late to do anything about them. Meantime the participatory approach help to promote building local capacity to respond to the coming change in future.

¹ Buchan D. Participatory Impact Assessment as a Tool for Community Empowerment// http://www.corydon.co.nz/docs/IAIA_book.pdf last visit 01.12.2004; Buchan, D. 1991.

D 4.1.4.3 Future perspectives related to the social impact assessment of marine transportation and associated infrastructures on Arctic Russian communities

The report gives some findings for the future possible coexistence and attitudes of two modes of life in the same territory; it demonstrates in general why it is important to consider the multiple effect of oil transportation and highlights that impacts could be understood differently by different groups of society (by indigenous and newcomers, rural and urban inhabitants).

Even on the example of Nenets autonomous district one can see that exist several proposals for the exact way of oil marine transportation. The future impacts of each chosen scenario may differ from the initial point (like terminal location) to the various accompanying circumstances. Therefore, a future *special assessment, unique case by case*, should be carried out and it should be based on the exact relevant technical data and other multilateral information of the project (value of proposed work with timetable, scheme of infrastructure, number of workers). Consequently, suggested *mitigation measures* could be common in general, but they *will be specific for each chosen scenario of transportation*. In the Nenets autonomous district, the Varandey terminal already exists and the future of Svyatoi Nos terminal is under discussion. Indigenous and local peoples have a point of view, expressing it in a statement that “what was done already is done” (which means that huge financial investment was expended for Varandey terminal and its surrounded infrastructure and that regardless of their opinion, it will not be removed).

The local people considered that the *following strategy* is the best in this situation:

- 1) To look for the points for future mutually beneficial agreements and coexistence;***
- 2) To learn the lessons of the past in industrial development when planning further development.***

Public reaction to the Svyatoi Nos scenario of oil transportation, proposed by the local administration, is different. An overview of mass media data and interviews indicated that many questions asked by local peoples about this project

currently remain without satisfactory answers from the project planners. To provide future balanced development, the leaders of indigenous communities strongly require the application of the participatory approach from the project planners. ***The international community of scientists, businessmen, and policymakers has to play special role in developing more advanced negotiations between indigenous peoples and industrial stakeholders.*** Future of the long-term international projects should be discussed on many levels with participation of officials from the local administration and non-governmental organisations that represent the interests of small-numbered group. Open multilateral discussion can become an instrument for increasing awareness of issues that affect people, generating common understandings and empowering communities through increased knowledge of, and access to, decision-making processes. This in turn serves to promote greater public accountability among decision-makers.

Social impact assessment of oil marine transportation in Nenets autonomous district

1. Introduction

1.1. Objectives of the social impact assessment

The main task of the Arctic Centre (University of Lapland, Finland) within the framework of the ARCOP project is to carry out overview studies focused on assessing the potential socio-cultural impacts of oil marine transportation on indigenous peoples and local communities. The following objectives of the study are considered its constituent parts:

- i) An analysis of the potential interaction between planned routes, infrastructures and local communities
- ii) An assessment of possible impacts and socio-cultural indicators; future perspectives relating to the social impact assessment of oil marine transportation and its associated infrastructure on Russian Arctic communities.

Nowadays, an SIA is an integral part of an environmental impact assessment and provides a greater understanding of the multilateral consequences of planned projects and programmes. Even if the “social impact assessment statement” has already had quite a long and rich history, there is still a wide range of varieties as to how it should be implemented. This section of the report does not aim to present the 30-year history of SIA studies; rather, it concentrates on revealing the general concepts and methods that characterize a social impact assessment in general.

After adopting the National Environmental Policy Act (NEPA) in the U.S.A. in 1969, the social impact component was officially accepted as an essential part of environmental planning. Thereafter, it spread to other countries, reflecting their national requirements. The International Association for Impact Assessment (IAIA) was organized in 1980 In order to bring together researchers, government employees, practitioners, and those who use all types of impact assessments. It set out guidelines for making a social impact assessment in order to help agencies and local stakeholders in assessing impacts. The IAIA sees social impacts as the “consequences of any public or private actions that alter ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as

members of society affecting human population”.² Social impacts include not only economic consequences but also changes in the norms, values, and beliefs that govern and rationalize peoples’ activities as members of a given society. While the interpretation of the assessment findings, it is essential to recognize that different groups of society have widely differing worldviews, level of life and possibilities to present the point of view. There may be varying benefits of the project for almost all involved parties; SIA has a special duty to identify those whose adverse impacts might get lost in the aggregate benefits.

The methodology for an SIA stresses the necessity of applying the assessment to all stages of any activity – planning, construction, operation, decommissioning – because different changes may occur at each stage. An SIA should not only show the possible negative impact but also point out the measures to mitigate them; of no less importance is the issue to highlight the conditions and measures that may maximise the positive outcomes of a project.³ Often, for truly effective positive impacts, additional planning and programmes are required. For example, creating employment could be beneficial for local communities but in reality, the local people may not have sufficient skills to work for the industry and employees have to resort to calling for workers from other districts of the country. In order to achieve positive impacts on local communities it is often necessary to support local educational programmes beforehand.

In assessing the possible impacts of any project or activity on the population, it is important to find out the available data on a previous similar activity. All circumpolar States have indigenous populations who live on the shores of the Arctic Ocean and lead a certain way of life that depends on marine resources. The Arctic indigenous peoples in Alaska, Canada and Greenland faced industrial pressure earlier than the indigenous peoples of Russia did, and they achieved success in recognising their rights earlier.⁴

² Guidelines and principles for social impact assessment prepared by the interorganizational Committee on Guidelines and Principles for Social Impact Assessment. May 1994 (http://www.nmfs.noaa.gov/sfa/social_impact_guide.htm).

³ Vanclay F. 2003: 6.

⁴ Transit management in the Northern Passage. Problems and prospects. 1986:48.

Unlike other countries, social impact assessment in Russia has not been an essential part of any planning for industrial projects and until recently, it has existed mostly as optional formality. In the 1970s, the industrial exploration of the Russian North sharply expanded and it was soon accompanied by the allotment of land in the tundra and taiga that had traditionally been occupied by indigenous peoples. Thousands of seasonal workers and newcomers sought jobs in the Arctic region. The planners had not considered the impacts the newcomers and industrial operations would have on the daily life of the northern inhabitants.⁵ At that time, the typical direct impacts were officially assessed as positive and progressive, while the negative effects were not taken into account. With the beginning of perestroika in Russia, after advancing in glasnost and the transition to a market economy, research teams from the Russian Academy of Science conducted special studies into the impacts placed by administrative and social projects on the local populations of Russia. These were academic surveys and consequently, their results have not been implemented in practice. In 1994-1995, Russian ethnologists actively worked attempting to introduce a specialized evaluation procedure for social impact assessment into official State practice.⁶ Later the joint efforts of RAIPON representatives, lawyers and scientists brought some success. A social (or ethnological) assessment should now be performed in Russia when so demanded by a local people or its representatives (Federal Law № 82 “On Guarantees of the Rights of Indigenous Peoples in the Russian Federation”, Section 8). In 2002, the social impact assessment (ethnological expertise) of a Gazprom project was the first time commissioned by the indigenous association “Yamal – potomkam!” (“Yamal – for the future generations!”). The assessment was devoted to the potential impacts of implementing one of Gazprom’s projects (exploratory development works on the Obskaya and Tazovskaya Bay shelves) and on the sustainability of the northern indigenous peoples in the related area.⁷

Some imminent conflicts between oil companies and traditional land users encouraged the Association of the Nenets people “Yasavey” from the Nenets

⁵ Pika A., D. Bogoyavlensky 1995:71; Khorolya D.O. 2003:97.

⁶ Sokolova Z.P., N.I. Novikova & N.V. Ssorin-Chaikov 1995:

⁷ Opit provedeniya etnologicheskoi ekspertizi. 2002.

Autonomous District to prepare a number of amendments that dealt with the social impact assessment of the regional law “About reindeer husbandry ”; these amendments were then accepted by the Assembly of Deputies of the Nenets Autonomous District. Article 17, Section 4 of this Act guarantees the right to persons engaged in reindeer breeding, their authorized representatives, and also representatives of the Association of the Nenets people “Yasavey”, to initiate and perform environmental and ethnological economic and other activities that could prevent infringement of the interests of reindeer husbandry. Unfortunately, due to the lack of sufficient financing for independent assessment, local stakeholders have been unable to accomplish this task.

1.2. Analysis of potential interactions between planned infrastructures and the local communities

There are at least two possibilities to assess the direct impacts that fall within the scope of the oil marine transportation issues: the immediate consequences of icebreaker and tanker navigation and the complex assessment of the impact of the oil marine transportation system itself.⁸ The ARCOP project defines oil transportation as an integrated transportation system where the interrelations of its separate elements are singled out, this approach was used for the social impact assessments carried out by researchers in the INSROP project⁹ and it was applied to this assessment as well.

The basic impact caused by navigating vessels on marine environment is most likely due to casual oil-spills and the subsequent spoiling and disruption to marine flora, organisms and fish¹⁰, therefore vessels might affect private fishing and the local fishing industry. To be able to determine future impacts, local inhabitants need to know about the possible changes in general sea biota, fish diversity and in the size of the fish population, and about what may occur as a result of crude oil transportation. In this case, social impact assessment is highly dependent on the results of the environmental impact assessment,¹¹ meantime local peoples of course

⁸ The Challenge of Arctic Shipping. Science, environmental assessment and human values. 1986: 48.

⁹ Anderson D.G. 1995; Boyakova S.I. 1996.

¹⁰ Patin S. 1999:110.

¹¹ Denisov V.V. 2002.

may in fact already have some general expectations based on their previous experience or on what resembles other activities in the area.

Figure 1 Current routes for oil transportation in Northern Russia



The dynamic growth of oil and gas production in the north-western part of Russia has spurred several transportation projects. With the State monopoly in oil transportation disappearing, various companies have started to develop separate export strategies that often compete with each other. The given assessment focuses on the oil transportation programmes for the Nenets Autonomous District and their potential impacts on the future well-being of the local communities.

The basic technical background data for this report was obtained from ARCOP documents and from interviews during 2003-2004 with officials of the Naryanmarneftegaz Company (a LUKOIL subsidiary), the company that is constructing the terminal facilities.

At present, there are two possibilities for oil transportation in the Nenets AD. The first is to the south via a surface pipeline stretching over Kharyaga to the Komi Autonomous Republic. The second to the north via the Varandey terminal, which is the only sea outlet for crude oil in the Nenets Autonomous District.

Another terminal planned for Svyatoi Nos Cap (Indiga terminal) in the Nenets AD is at the stage of multilateral discussions.

The Varandey terminal has been in operation since 2000 and its capacity is now being expanded. There are two phases of the project running simultaneously – construction and operation – in a row of four sequential stages in all process (the other two stages are planning (first stage) and decommissioning (fourth stage)). An analysis of the previous and present stages of construction and operation provides an opportunity to monitor changes, to see how promises and obligations are kept, and to predict additional consequences. The Varandey terminal is an integral component of the transportation-technological system for transporting crude oil from the Timano-Pechora region. The terminal consists of a coastal oil repository, service centre building, underwater pipeline and sea berth. Besides the terminal, the system includes pipelines from the oil deposits to the coastal repository, tankers, icebreakers and a crude oil reloading base in Kola Bay. Further the crude oil will be shipped to Rotterdam in The Netherlands. It is planned to keep the Varandey terminal operating for 25 years. The first stage of operations at the terminal is supposed to provide oil from the closest deposits (first phase: from the Varandey and Toravey oil deposits and from prospective deposits in Toboy, Myadsey, North-Soremboy, Medyn, etc). 100.64 hectares of land (for the period of construction – 10.92 hectares, and for the period of exploitation – 89.71 hectares) are needed to enlarge the existing terminal and its appropriate facilities.¹² The largest amount of the required land (88.4 hectares) belongs to the reindeer-herding farm “Erv” on the condition of general tenancy.

Negotiations of alternative oil sea transport through the above-mentioned Indiga terminal (on Cap Svyatoi Nos in the vicinity of Indiga village) have been taking place in the Nenets Autonomous District for several years, progressing and regressing depending on internal and external policy and the general situation in region and in country. This “East-West” project was raised for discussion in 2001 by the NAD administration.¹³ According to its proposal, pipelines with the length of 440 kilometres should cross the lands of the Nenets AD and bring the oil deposits

¹² Ministerstvo Prirodnikh Resursov. 2003.

¹³ Nerm yun (Zapolyarnie vesti). 2002: No 22 (100): 3.

into one system. Currently, the advisability of the Indiga terminal is being actively discussed in the local mass media.

To begin the analysis, it is useful to consider the general probable variants of the industrial activity and the subsequent impact of oil sea transportation.

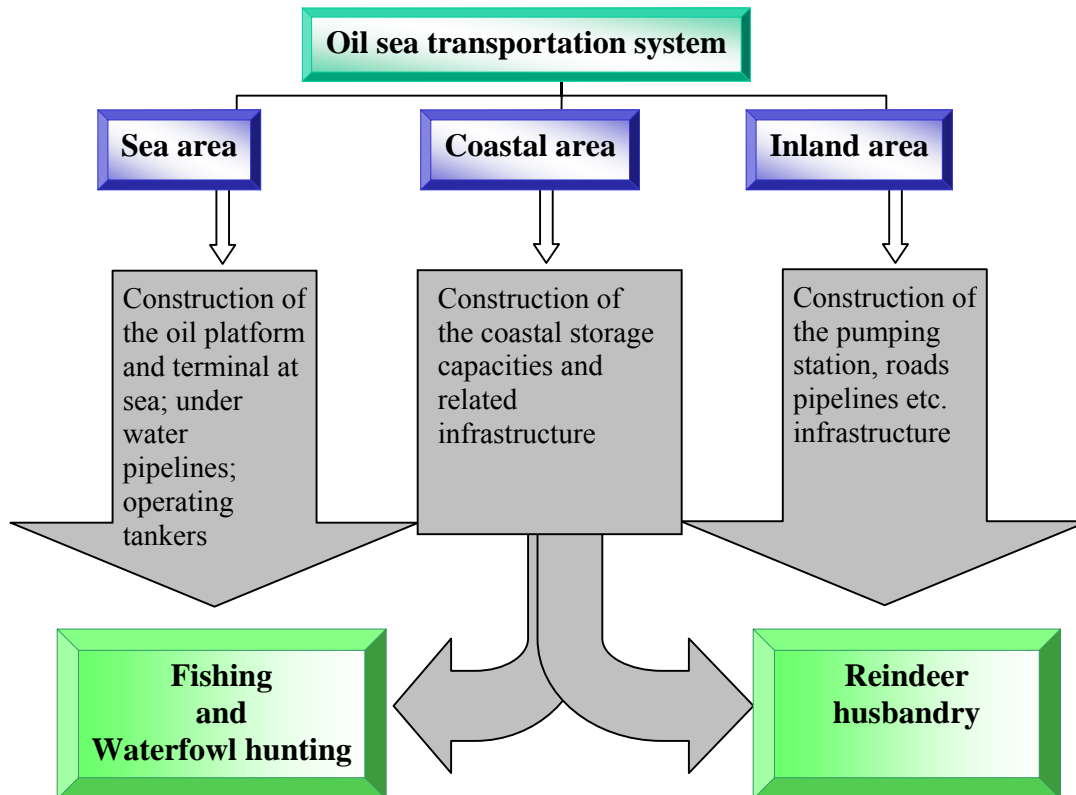


Figure 2 *Interrelation of activities connected with oil sea transportation*

When tender with new project the industrial companies stressed economic profit and environmental safety of their activity, meantime they emphasises the social benefits and positive impacts of their project.¹⁴ This assessment raises the issue that there are a considerable number of various impacts on the population arising from the industrial activity, even within a single district. There could be different perceptions of benefits and losses on the part of both: planners and local stakeholders. The SIA helps to raise the awareness of the needs of the local

¹⁴ Principles for impact assessment: The environmental and social dimension. Report No: 2.74/265. August 1997. International Association of Oil and Gas Producers. Internet site: www.ogp.org.uk.

communities among project planners, governments and the international community and it provides feedback between the parties involved.

1.3. Selection of the field site. Methods and sources of the report

A social impact assessment cannot be accomplished without consultations with local stakeholders. Consultation is the cornerstone of this SIA and it has been one of the basic methods used during fieldwork. Consultation provides the means to identify interested stakeholders, their issues, concerns, needs, ideas and values as well as helps find areas of mutual interests and the potential activities of both parties: the local community and companies.¹⁵ Contacts were established during fieldwork with the association of the indigenous peoples of the Nenets Autonomous Area “Yasavey”, with the Russian Association of Indigenous Peoples of the North (RAIPON), with members of the reindeer herders’ community and with representatives of the NAD Administration. The main statements concerning the fieldwork were discussed with representatives of the regional association of the indigenous peoples of the Nenets Autonomous District “Yasavey”.

Figure 3 *Field sites at the Nenets AD*



¹⁵ Social Impact Assessment. International Principles. IAIA. May 2003, Special publication series, № 2.

The fieldwork took place in June-September 2003 and in July 2004; it was conducted by Nina Messhtyb in the administrative centre of the Nenets Autonomous District, the town of Naryan-Mar, in the village of Iskatelei (the second largest settlement in the NAD), the village of Krasnoe (home village of reindeer herding families from the Varandey tundra), the reindeer husbandry camp on the Varandey tundra, the villages of Indiga and Viucheskoie (two villages in the vicinity of the Svyatoi Nos terminal, as proposed by the administration of the NAD), the village of Oma and Kanin tundra (to execute a comparative study into places with no current industrial activity), the Yuzno-Shapkino oil deposit (an example of co-existing extensive and intensive ways of utilising natural resources with the support and control of the European Bank).

The sources that provided main data for the report are:

- 37 interviews with local administration's officers, officials and residents of the district¹⁶;
- 60 structural questionnaires (the structured questionnaire was drawn by the local indigenous peoples in the villages of Indiga – E. Toropova and in Krasnoe and Varandey tundra – A. Viucheisky¹⁷);
- statistical data;
- mass media data;
- published scientific research;
- federal and regional legislation;
- archived sources.

The following bellow section of the report gives the observation of the social peculiarities and infrastructure of the area, the specific development of the branches of its local economy and the level of employment together with an analysis of the basic factors determining the social stability of the different groups of the population of the Nenets autonomous district.

¹⁶ Interviews form one of the important sources for case studies. We used open-ended interviews, i. e. asking informants' opinions on specific themes with particular attention to the topic of study.

¹⁷ A questionnaire is a structured set of written questions that should be answered.

2. Nenets Autonomous District: Land and People

2.1. Geography and local characteristics

Figure 4 Geographical position of Nenets AD



The Nenets Autonomous District is situated in the north of the European part of Russia and it borders the Archangelsk region, the Komi Republic and the Yamal-Nenets Autonomous District. In the north, the border meets the coastal lines of the White, Barents and Kara Seas. Most of the NAD is located to the north of the Arctic Circle. Almost all central and north-eastern parts of the NAD (95%) fall within the permafrost zone. There are two climatic districts: the polar district (southern part) and the subarctic district (the northern and eastern parts of the NAD). In January, annual temperatures vary from -9°C in the west to -20°C in the east. In July, annual temperatures vary from $+6^{\circ}\text{C}$ in the north to $+13^{\circ}\text{C}$ in the south. The greater part of the NAD falls within the tundra zone (76.6%), some within forest-tundra zone (15.4%) and southwest part lies within the northern taiga subzone (8%).

The NAD is rich with hundreds of species of moss and lichen and more than 600 vascular plant species. There are 31 land mammal species and some of them are hunted: the Arctic fox, red fox, brown bear, marten, otter, and elk. More than 160

bird species have been recorded in the Nenets Autonomous District¹⁸, some of which are on the list of endangered species – the “Red Book” (*Krasnaya Kniga*)¹⁹. Key mew and nesting sites on the coast and islands of the Nenets Autonomous District have been classified by the Ramsar convention as wetlands resources of international importance. The territory of Varandeyevskaya lakhta is valued as a pan-European ornithological site.²⁰

The water resources in the Nenets Autonomous District consist of three thousand kilometres of White, Barents and Kara Seas’ coastal line, the Pechora delta, more than four thousand kilometres of small rivers and tributaries, and thousands of lakes of different sizes. There are 74 species of fish²¹ in the Pechora Sea. There are 19 species of sea mammals in the south-eastern part of the Pechora Sea and its surroundings and 13 of them are in the list of endangered species (the “Red Book”). Some of them do not leave the area whereas others have seasonal migration.

Figure 5 Scheme of the territory of Nenets National Reserve



In the vicinity of the possible tanker route is situated the Nenets National Reserve, which was established to conserve wildlife. It stretches out into the northeast of the Malozemelskaya tundra and has a water area that includes islands of the Barents Sea (Gulyaevskie Koshki, Matveev, Golets, Dolgij, Bolshoj and

¹⁸ 110 of them breeding birds and 20 over-wintering birds

¹⁹ Peregrine falcon, merlin, little tundra swan and clark

²⁰ Komitet prirodnih resursov po NAO Naryan-Mar. 2002.

²¹ Among others unique species from families of eel-pout (11 species), Arctic salmon (10 species), whitefish, etc.

Malij Zelenets, with two-kilometres of water area around the islands) and occupies 131,500 hectares. The Nenets National Reserve is an important place for the reproduction of marine fauna.

2.2. Administrative system

The Nenets National District was established in 1929 together with the overall setting for ethnic autonomies in the former USSR. The Nenets belong to the officially recognized group of small indigenous peoples of the North, whose collective status is secured in the Constitution of the Russian Federation.²²



Picture 1 Symbols of Nenets AD

Nowadays, in administrative-territorial terms, the Nenets Autonomous District (*okrug*) is a part of the Archangelsk region (*oblast*), although it has the status of an independent subject of the Russian Federation. The Nenets Autonomous District consists of 19 municipal units, which include 1 town, 2 settlements, and 42 villages.

The Governor, as the Head of the Administration of the Nenets Autonomous District, is the highest executive official of the area. The Assembly of Deputies is the highest legislative body. The Nenets AD implements federal social and economic programmes, actively participating in ones focused on the North (for example, “Children of the North” (*Deti Severa*) and “Removal from the North” (*Pereselenie is raionov Krainego Severa*), etc).

²² Constitution of Russian Federation. 1993. (Article 69). *Russian State Constitution* “guarantees the rights of indigenous minorities in keeping with generally recognised principles and standards of the international law and international treaties signed by the Russian Federation”.

2.3. Socio-demographic situation

According to the 2002 census, the total population of the Nenets Autonomous District comes to 41,500. One of the important features of the district's modern development is that urban population predominates; the urban area has a population of 26,200 and 15,300 people live in the rural area.

The demographic statistics show that the permanent population of the Nenets AD has had tendency to decrease over past 10 years. This can be explained by the considerable decline in the number of newcomers to the area during the transition period and perestroika (the middle of 1990^s). There are other factors that explain the decline in the population, among them - the federal programme "Resettlement from the North" and the generally low birth rate in the RF. The figures are presented in the table below.

Table 1 *The number of population in the Nenets AD (in thousands).*²³

	1979	1989	2002
All population	47.2	53.9	41.5
Urban population	27.9	34.3	26.2
Rural population	19.3	19.6	15.3

Current demographic specifics for the Nenets Autonomous District is that the majority of its urban population inhabit the administrative centre – Naryan-Mar (18,600 people).²⁴ In addition, 7,000 people live in its satellite – Iskatelei.

The district's rural population is characterized by high dispersal over the area (*ad notam*: the average density of the NAD population is 0.23 people per square kilometre). There are 42 villages of various sizes; just few people inhabit some of them whilst others have a population of almost 2,000. The typical size of a village is about 300-500 people. The scattered and rather small size of the settlements can be explained by it being economically justified due to the natural environment. Old-settlers of Russian origin and the Komi and the Nenets peoples settled on the seacoast and by rivers and were engaged in fishing, hunting and gathering; this type of dispersion was the most suitable for the environmental

²³ Nenetskii okrug za 70 let. Kratkii statisticheskii spravochnik. 1999.

²⁴ Nyaryana Vynder. 2003:No73 (18233).

capacity of the territory. The table below presents figures on the households and population in each of the rural municipal units of the NAD, with special notes on the number of the Nenets.

Table 2 *The population of the rural municipal units including the Nenets population on 1 January 2001.*²⁵

Municipal unit	The number of Households	The number of population (persons)	The Nenets population (Persons and % of Nenets among other nationalities in a municipal unit)
Total	5242	17129	6466 (37.7 %)
Andeg	99	290	59 (20.3%)
Velikovochny	548	1561	49 (3.1%)
Kanin	483	1759	719 (40.8%)
Kara	187	721	595 (82.5%)
Kolguev	113	452	393 (86.9%)
Kotkinsky	153	490	46 (9.3%)
Malozemesky	282	1099	1007 (91.6%)
Oma	378	1193	529 (44.3%)
Pesha	512	1465	108 (7.3%)
Primorsko-kuisky	542	1849	842 (45.5%)
Pustozersk	380	1155	221(19.1%)
Tel'visochny	284	966	55 (5.6)
Timansky	309	948	460 (48.5%)
Khorey-Ver	259	901	467 (51.8%)
Khosedo-Kharsky	254	841	299 (35.5%)
Shoina	182	478	129 (26.9%)
Yushar	224	784	428 (54.5%)
Varandey (The Varandey municipal unit was abolished on the 30 November 2000) by NAD decree N 196-ed f	53	177	60 (33.8%)

The table shows that the percentage of the Nenets population is different in each rural municipality: varying from 3.1% to 91.6%, with the average number of the Nenets among other nationalities in rural areas relatively high, constituting 37.7%.

²⁵ *Ekonomika i sotsialnaya sfera Nenetskogo avtonomogo okruga. 1997-2000. 2001: 8-9.*

It is important that the majority of the Nenets live in rural areas in contrast with the general situation in the Nenets Autonomous District, where the population concentrates in urban areas (as was mentioned above in Naryan-Mar and Iskatelei).

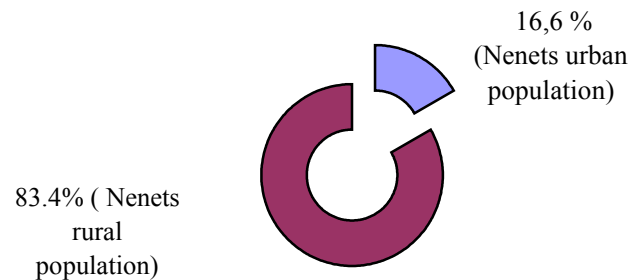


Figure 6 *Nenets rural population in the Nenets AD*

The population of the Nenets Autonomous District is ethnically mixed. Besides more than 7,000 Nenets, many other nationalities live there (the 2002 census states that there are 72 different nationalities in the Nenets Autonomous District); the most numerous are Russians, Nenets, Komi and Ukrainians.²⁶

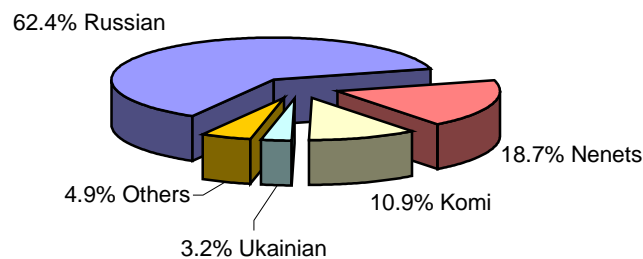


Figure 7 *Ethnic structure of the population in the Nenets AD*

It is interesting to look at some peculiarities of the demographic process in the Nenets AD. From the 1989 census to the 2002 census, the number of permanent Russian inhabitants greatly declined (by 9,547 people) whereas the number of the Nenets remained stable and even showed positive dynamics. The demographic data give the understanding that the Nenets connect their well-being with their home district. Whereas other nations' representatives have a high rate of external migration, the migration of the Nenets has mostly an internal character.

²⁶ Data from the State statistical committee of the Nenets Autonomous District.

2.3. Economic development

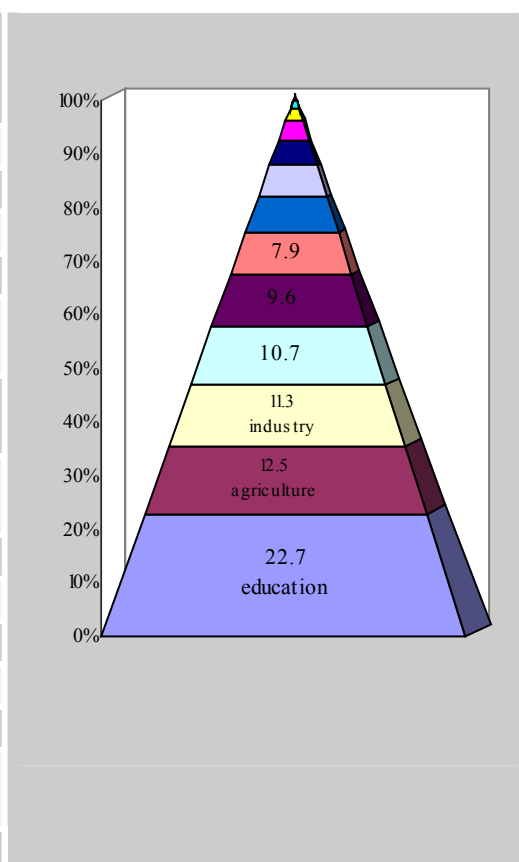
Until recently, reindeer husbandry and fishing constituted the basis of the NAD economy. By the end of the 1990s, the situation changed greatly and the oil extraction industry obtained the leading role in regional economic development. In the meantime the current socio-economic situation in the Nenets Autonomous District still has dual character - two vitally important sectors co-exist in the district. The oil extraction industry provides the most income for the regional budget. In the meantime, reindeer husbandry is the most important industry for the sustainable existence of the rural inhabitants, their subsistence and employment. The table below presents data that prove that “agricultural” branch of the district economy which includes reindeer husbandry still accounts second highest employment in the (education is another large source of employment in the Nenets AD).

Picture 2 *Reindeer pasture in the vicinity of oilrig in Varandey tundra*



Table 3 *Proportion of employment in different spheres in the Nenets AD in 2000.*²⁷

Thousands of people	%	Sphere of employment
17.6	100	Total employment
4.0	22.7	Education
2.2	12.5	Agricultural industry
2.0	11.3	Industry
1.9	10.7	Geology and hydrometeorology
1.7	9.6	Housing and communal services
1.4	7.9	Health and social security
1.1	6.5	State governance
1.0	5.7	Transportation
0.8	4.5	Building
0.7	3.9	Trade and catering
0.4	2.2	Communication
0.1	0.6	Credit and National Insurance
1	0.6	Pension provision
0.2	0.3	Other

**Figure 8** *The percentage of employment in different spheres of employment in the Nenets AD in 2000*

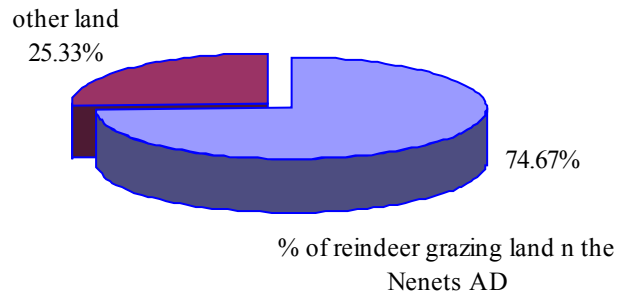
The character of economic development in the NAD is in many respects determined by its geographical position and the availability of natural resources (renewable and non-renewable). There are at least two main determinative factors:

- i) Most of the land in the NAD is unsuitable for agriculture and is used for reindeer grazing only.
- ii) The part of the territory of the Nenets AD belongs to the Timano-Pechora Oil and Gas Field Province. (Oil and gas fields pass through the Komi Republic and the Nenets Autonomous District and extend to the continental shelf on the Pechora Sea).

²⁷ Экономика и социальная сфера Ненецкого автономного округа. 1997-2000. 2001:12.

The land of the Nenets Autonomous District totals **176.7** thousand square kilometres; reindeer grazing land occupies **132** thousand square kilometres (**74.67%**).²⁸ In 2000, the land used for cultivation amounted to only 118 hectares (110 hectares were used for potatoes).²⁹

Figure 9 *Distribution of the land in the Nenets AD (%)*



The Nenets AD is one of the main reindeer husbandry districts of the Russian North. The land suitable for reindeer husbandry in the Nenets Autonomous district is divided between more than 20 farms with different forms of property ownership (private, collective), which use each plot of land for seasonal reindeer pasturing. Each farm has a relatively large plot of land for the seasonal migration of the reindeer (according to natural instinct and the optimal conditions for grazing). Different grazing areas have different feed capacities and values for reindeer (lichen, grass, bushes) and are suitable in different seasons and times.³⁰ To mitigating the pressure on grazing land, the Nenets have traditionally organised circular migration routes, thus giving when possible the grazing grounds time to recover.

Reindeer husbandry provides an important source of employment for the rural population. There are 942 people directly engaged in reindeer husbandry (623 breeders and 319 chum-workers).³¹

²⁸ *Ekonomika i sotsialnaya sfera Nenetskogo avtonomogo okruga. 1997-2000. 2001: 4.*

²⁹ *Ekonomika i sotsialnaya sfera Nenetskogo avtonomogo okruga. 1997-2000. 2001: 8.*

³⁰ Bogdanov V., T. Gorokhova 1997: 315-319.

³¹ Information received from the Association of Nenets peoples Yasavey in October 2004.



Picture 3 *Fur handicraft workshop in Naryan- Mar*

The actual number of people dependent from reindeer husbandry is actually much greater. These people include the staff responsible for the finances and economics of reindeer enterprises, the herder's families and relatives living in rural settlements for the greater part of the year, workers in hide workshops and their families, and the multitudinous consumers of reindeer meat. Besides being eaten locally, reindeer meat is widely consumed throughout the Nenets AD. For state-funded organizations³² it is especially important, for them reindeer meat is more accessible than beef or pork due to low cost and easy availability. Besides the importance of reindeer husbandry for employment and food it also has a culturally important significance for the Nenets and Komi people. Traditional ecological knowledge of these people could not be preserved without reindeer husbandry. Reindeer is the axis of Nenets beliefs and cultural values. The kin relationship and social net of bartering and distributing goods and services is based on reindeer husbandry. Thus reindeer husbandry has the vital importance on the identity and cohesion of the family and community of Nenets society.³³

Fishing and hunting are other branches of the traditional economy that are based on the use of renewable resources. In the Nenets Autonomous District,

³² schools, hospitals, nurseries and kindergartens

³³ Yuzakov A.A., A.D. Mukhachev A.D. 2000:83.

fishing is carried out in the rivers, lakes and sea coasts stretching from the Kanin Peninsula to Karsk Bay.



Picture 4 Fishing near the village of Indiga (Nenets AD, 2003)

Fish are the key factor for income in the local fishing industry as well as a pillar of a family's daily diet and barter system. Fish provide a substantial means for the survival not only of the Nenets population but also for most of the rural inhabitants. Nineteen species of fish in the Nenets AD are commercially important.³⁴ An official from the NAD Department of Agriculture provided data concerning the reduction in the numbers of valuable fish species and stated that the cause was intensive commercial fishing and a reduction in the quality of fish habitats due to the intensive extraction and transportation of hydrocarbons, oil spills and the discharge of wastewater into the Pechora River.³⁵ In the Nenets AD, some villages and/or families live mostly on fish, others depend primarily on reindeer husbandry. From time immemorial a bartering system allows local people to use renewable resources in a complex and most sustainable manner. If in future people will have to abandon reindeer husbandry, they will increase pressure on fishing in order to survive, this in turn could have further impact and distort the human-environment balance.

³⁴ These include the navaga, Pacific herring, plaice, smelt, Atlantic salmon, Arctic char, Siberian white salmon, lake white fish, pike, burbot, perch, trout, and others.

³⁵ Durkin A.I. 1997: 155.

Hunting is another component in the complex traditional subsistence. Most villagers hunt and in 2000, there were 31 officially registered hunting enterprises with 454 thousand hectares of hunting territory allotted to them.³⁶ The importance of *hunting for furs* has declined over the past decade because of a decline in consumer demand. *Waterfowl hunting* is still important for the supply of food for village and tundra population. In spring, after long winters, reindeer are emaciated and the Nenets avoid slaughtering the animals.

In the past, hunting *marine mammals* was an essential part of life of coastal inhabitants. The mammals' fat was used as addition to diet. Meat was a very important food for dogs because it contains protein; the skin was used for clothing, shoes and harnesses. Now in the Nenets AD, small private enterprises hunt small amounts of marine mammals³⁷ in the former villages of Volonga, Tobsega and Varandey as well on the Kolguev Island. For a complex assessment, it is essential to take in account the fact that sea transportation would not have a spot impact but rather, it will be spread over the entire shipping passage. In the neighbouring to NAD area, in the Archangelsk region, there are several kolkhozes (cooperative farms) made up of Russian old-settlers who specialise in hunting sea mammals.

Industry

Despite the fact that oil extraction began in the NAD a long time ago (in the 1960s), harsh climatic conditions and the lack of a transportation infrastructure impeded its exploration and extraction. By the end of the 20th century, 75 deposits were in operation in the Nenets AD: 64 oil deposits, 6 oil and condensed gas deposits, 3 condensed gas deposits, 1 gas deposit, 1 oil and gas deposit.³⁸ In 2002, oil production in the Nenets Autonomous District reached 5.1 million tons.³⁹ Information from the regional press service stated that even if the pace of developing the oil extraction industry is relatively high, still only 5% of explored oil reserves and 1% of gas reserves were being extracted by 2004.⁴⁰ The future

³⁶ *Ekonomika i sotsialnaya sfera Nenetskogo avtonomogo okruga. 1997-2000. 2001: 27.*

³⁷ Ringed seal and bearded seal

³⁸ Chimbulatov F., A. Firsov 1997: 77-79.

³⁹ Frantzen B., Bambulyak A. 2003:6.

⁴⁰ <http://nao.nm.ru/archive/2004-06.htm>

development of the hydrocarbon resources in the Nenets AD very much depends on the possibility to transport it to consumers.

Transportation

Surface transport in the Nenets AD is limited to 195.9 kilometres of roads (149.6 with a paved surface). Aircraft and helicopters carry most passengers in the area; cargo is mostly transported by sea. There are no railway connections to the Nenets Autonomous District.

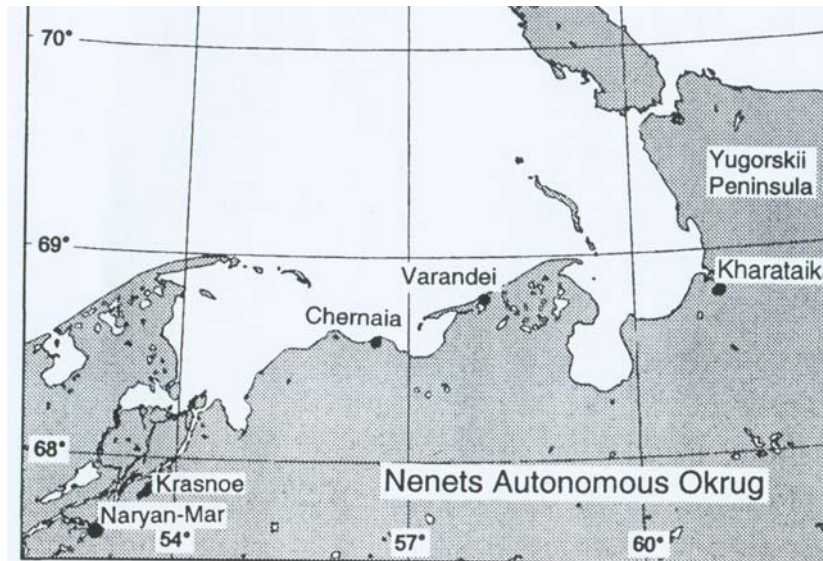


Picture 5 Helicopter is a main form of transport for people travelling in the Nenets AD

3. Previous experience of impacts on the local community

This part of the report presents some background to the impacts of the first term of industrial activity (1970s – 1990s) in the Varandey area. Although the development phase was in the past, it is important to be familiar with it in order to avoid the same possible mistakes and negative consequences. Field materials illustrate the significance of providing any industrial operations in a place bordered by/or co-existed with indigenous land users with an appropriate long-term social policy. The development of the oil extraction industry in Varandey has had direct impact on the village of Varandey and tundra reindeer herders.

Figure10 Location of Varandey (Nenets AD)



3.1. Varandey: village and terminal. Historical background.

Varandey was registered as a village, in the 1930s. Both settled and nomadic populations coexisted in the area. The Varandey Nomadic Aboriginal Soviet (*Kochevoi Tuzemny Soviet*) was established in the 1930s; 650 nomads were registered in the tundra surrounding Varandey.⁴¹ In 1936, there were 8 households with 28 inhabitants in the village of Varandey; fishing and hunting was the main occupation of the villagers. The settled and nomadic population always had strong bartering relations with each other. Collectivisation deprived many reindeer herders of their reindeer and so they settled in the village. On 1 January 1940, the population of Varandey (together with the tundra population) came to 840 (588 Nenets, 118 Komi, 134 Russians). By that time, 21,702 reindeer (including 11,416 private reindeer) had been registered.⁴² Fishing, hunting for sea mammals and furs and gathering berries constituted the basic occupation of the villagers.

⁴¹ Istomina U. 2001:250.

⁴² State Archive of the Nenets Autonomous District. Fond 1, book 1, file 127, lists 14-15.

*Picture 6 Dog team in the village of Varandey
(photo from the private archives of V.V. Chuprova)*



Former inhabitants of the old Varandey recalled:

“Earlier, starting from November till February-March we fished for navaga, and we caught flounder all the year round. We fished with nets in the summer; we put special net-traps – rjuzhi – on the rivers. The local people salted fish and when refrigerators appeared, we began to deep freeze them.

The people of Varandey used to keep sled dogs and they went hunting with them. Each hunter had two dog teams, six or four dogs in each. People caught saika [sort of fish – N.M.]and hunted seals to feed the dogs.”⁴³

With time, a medical post, primary school, post office and trading cooperative were organized in Varandey. In 1966, there were 240 inhabitants in Varandey. That year, first group of workers and equipment of the Western-Khaipudyr geophysical party of the Vorkuta geological expedition came to the place but this did not yet bring big changes to the everyday life of the locals. They felt the impacts starting from 1975, when the dry cargo vessel “Valdajles” unloaded more than 3 thousand tons of drilling equipment, tubes and construction materials on the fast shore ice at Varandey. V. Tolkachev, a writer who recorded the history of industrial development in the Nenets Autonomous District, wrote about the first builders in Varandey:

⁴³ Field notes, Naryan-Mar, Nenets AD, 2003.

“Temporarily, we’ve found ourselves lodged in an old Nenets settlement... First of all, we brought three tractors and a cross-country vehicle from the boat, and the work began. The cargo went in a solid flow. Tractors dragged everything to the storing site, which was in 4 kilometres, without any cranes. We worked for 12 to 16 hours a day. It seemed that we reached the limit of our capacity! But there was no limit, vessels came one by one, and all of them should have been unloaded without any delay...”⁴⁴

Even at the beginning of constructing this new settlement, the main supervisor, R. V. Trebs, had noticed the peculiar plan of the older Nenets settlement. It was located between the sea and a tundra lake, with houses forming an angle aimed at the shore. Unfortunately, no one paid any attention to it; in the middle of the 1970s, environmental and geological condition assessments were not carried out properly. The new settlement for workers and geologists was built about 5 kilometres from Varandey. With time, it absorbed not only infrastructure of the neighbourhood (school, shop, post-office, medical post), but even its own name. Since 1978, the name Varandey was used to refer to the geologist’s settlement – the base for the Varandey Oil and Gas Prospecting Expedition of Deep Drilling and the Field Party of Seismic Research Expedition № 7. The name “Old Varandey” was kept to refer to the fisherman and hunter settlement. Almost 1,050 people lived in New Varandey in 1977 (mostly geologists and their families). At that time, the life of the old settlers in Varandey had already greatly changed:

“... Remember, what that time was: noise, hubbub everywhere, they unloaded and unloaded their equipment from the ships. The construction site scared away the Arctic fox and other animals; they ran very far and hunters had to go after them farther and farther into the tundra. It became more difficult to feed the dogs, because we lost the possibilities to provide them with fish and seal meat (the water was all stirred up and shallow and fish became more scarce); the seal then disappeared completely. In the mid 80s, people stopped having sled dog teams. What had our men been left to do?”⁴⁵

⁴⁴ Tolkachev V. 2000:347.

⁴⁵ Field notes, Naryan-Mar, Nenets AD, 2003.

The initial industrial development of the Varandey area and the first phase in the construction of Varandey harbour has been carried out without even a tentative assessment of the impacts on the settled and nomadic indigenous populations.⁴⁶ In addition, other factors had not been properly taken into consideration. Geologists chose the place for the settlement without taking into account the geological processes in the coastal zone, which brought about coastal erosion. The speed of erosion accelerated with time; the coast received additional tectogenic stress (especially during storms). In the middle of 1970s, the coastal ledge collapsed in chunks of up to 2 metres wide. The use of transportation and building vehicles, including caterpillars, led to degradation of the soil and vegetation cover over the entire surface of the dune belt on Varandey Island.

That time is unforgettable for the local inhabitants:

*“How was it? In order to make the approach of barges more convenient, they tore the coastal line apart with the help of heavy boats and the coast crumbled, and the sand flowed. The sea came close to our settlement, so many huge cargos came and we felt the constant vibration of the ground, and the coast crumbled more and more. They tried to strengthen the shore with different metal scraps, but the sand just ate it away”.*⁴⁷

In spite of all attempts to protect the coast with metal constructions, the coast of the settlement New Varandey has been collapsing at the speed of 1.5 – 2 metres per year since the mid 1980s. From 1987 to 2000, erosion increased to a rate of 3-4 metres per year, which is two times higher than the natural erosion that takes place without the influence of man.⁴⁸ The ecological situation in New Varandey was difficult but in the meantime, the period of transition to a new type of economic relations – the transition to market economy with privatisation: from State to private ownership– began in Russia. For the inhabitants of the country, especially for the northern settlers, the process of transition was extremely hard. The State failed to support the small settlements that depended on State benefits and subsidies.⁴⁹ Almost three thousand inhabitants of New Varandey settlement not only suffered

⁴⁶ Tuisku T. 2002:149.

⁴⁷ Field notes, Naryan-Mar, Nenets AD, 2003.

⁴⁸ Sovershaev V.A., S.A. Ogorodov, A.M. Kamalov 2001.

<http://liber.rsuh.ru/Conf/Tek2001/ogorodov.htm>. Visited at 01.12.2004

⁴⁹ Tuisku T. 2002:189-205.

from flooding but they were also economically paralysed. In 1993, Varandey was declared a natural catastrophe zone and in 1996, the inhabitants began to be evacuated. Old Varandey, located more in a lagoon, avoided the disaster of flooding but no help came for its social rehabilitation.⁵⁰ No administration in the district, no new joint stock companies, which replaced the State geological organisations, attempted to restore the social infrastructure of the old settlement.

By 1998, 310 inhabitants (mostly Nenets and old settlers) still remained in 148 households in both villages. However, families were unable to survive without a school, post-office, shop and medical care. According to decision by the NAD Assembly of Deputies Session (30 November 2000), Varandey was excluded from the register of settlements in the district. The official history of Varandey ended and the history of the Varandey terminal began. On 21 August 2000, the LUKOIL Company reported about loading the first 10 thousand tons of oil at the Varandey terminal and its transportation by the planned route.⁵¹

What happened to the inhabitants of both New and Old Varandey?

The majority of the former workers from New Varandey had returned to the central parts of Russia where they came from. The old settlers and the Nenets did not want to go out of their native area. They did not want to leave the place where they had spent their lives.

One of the settlers of the Old Varandey shared her story:

*“They forced us to move away. When we were leaving, we only took what we could carry, but houses, boats... all the possessions of our life stayed there because nobody would have transported our snowmobiles, engines and houses”.*⁵²

Soon, a regional programme of resettlement for the local people from Varandey was established. The regional administration gave grants to purchase new apartments: it should be noted that the indigenous people had spent most of their lives on the seacoast and they had no idea about how to purchase real estate. The money they received seemed huge and some of them “ate it away”; in time, many realized that they had ended up without any money and without a place to live. It

⁵⁰ Golovnev A.V. 2000:135-142.

⁵¹ Lukoil Press-tsentr: http://www.lukoil.com/press.asp?div_id=1&id=392

⁵² Field notes, Naryan-Mar, Nenets AD, 2003.

was easier for a large family to buy flat if they all pooled their grants. It took single people longer to find something. Meanwhile, prices rose due to inflation. It was soon impossible to buy any suitable apartment. By February 2003, seven young single men resettled from Varandey still had no house or other place to live in.⁵³ The head of a handicraft workshop, which was organized to create jobs for the women from Varandey, pointed out problems that lead to a vicious circle:

*“In order to find a job you need to be officially registered in certain place, but some people aren’t because they don’t have a place to live and they can’t get a place to live (an apartment) without money, without a salary”.*⁵⁴

Some Nenets from Varandey adapted to the new life, others did not. Some people turned to alcohol, others returned to their native abandoned settlement. Unofficially, the nonexistent Varandey settlement is still inhabited by a few indigenous people (the exact number depends on the season; it could be from 12 to 20). The fragment of an interview presented below gives some insight into the situation:

“In winter, those men who could not stay in the city took snowmobiles and went to Varandey. You know, village people aren’t used to working from nine to five.

How do they live up there? There’s no shop, no electricity, nothing, but they exchange fish for fuel.

Sometimes, people can have problems. Officially, the place is a restricted State border zone. Some men negotiate with the guards and get passes for Varandey, but the men don’t go there to sit under the roof, they go to the tundra to hunt. So, it happens that the Nenets that lived and hunted for years since their childhood now violate the frontier regime.

Would you like to go back to Varandey?

The graves of our ancestors are in Varandey, as well as our sacred places. We long to go there. In fact, so many things connect us with the place. It’s very difficult to get an official pass to go there and we can’t take grandchildren into the tundra for the summer, so they can’t listen to the old men’s tales. The frontier guards ask us, “Why should we give

⁵³ Edey Vada. 2003. No 12 (70) 06.02., p.4.

⁵⁴ Field notes, Iskatelei, Nenets AD, 2003.

you a pass?" The certificate of a relative's death is not a good enough reason for them. In fact, this settlement doesn't exist in any official document.

We'd have liked to have the right to go there, but instead we've got to fight bureaucracy, put together hundreds of papers and change the village status to a dacha settlement. Our men are fishermen; they can fish, but to deal with paperwork... Besides, if you want to be fast and fly there you need to organize a helicopter trip or persuade oil-workers to give you a ride in the air.

It's very important for Nenets men to live close to nature., A Varandey Nenets Y. P. says he can't live in the city, "I'm a free bird there on the coast, and what am I going to do here in town – just sit and watch cars in the street? Is that a life?"⁵⁵

The Association of the Varandey Village Dwellers (*Zemlyachestvo*) has now been founded with the aim of preserving neighbouring relationships and local traditions and promoting the officially stated right to refer the Old Varandey as a summer place for its former settlers.

Today, local inhabitants as well officials confirm that the removal of the Varandey village was a mistake, although at that time it was a necessity because the local infrastructure and everything else had been destroyed during the industrial exploitation of the area.⁵⁶

The example drawn illustrates the importance of taking into account the interconnection of ecological, economic, social and political factors in the high Arctic. The analysed data demonstrate that all stages of industrial operations, including decommissioning, can have an impact on local communities. Operations without sufficient planning could destroy not only the economic foundation of the local inhabitants' subsistence but might also have negative consequences on their future social and cultural life. The topic of how to evaluate the "loss of culture and sense of place" is widely discussed. The researchers that assessed the impact of the EXXON-Valdez tanker's oil spill on indigenous community argue that "monetary compensation might allow villagers to enter into the western economy and purchase goods, to replace those goods traditionally extracted from the local environment,

⁵⁵ Field notes, Naryan-Mar, Nenets AD, 2003.

⁵⁶ See interview in the Appendix.

but money could in no way compensate for the culture loss”.⁵⁷ The field data give an example, which states that only financial injections do not represent sufficient social mitigation measures, and that long-term social programmes of rehabilitation are also needed.

Picture 7 *Old Varandey*



4. Case study of the impact of the oil transportation system on the local community

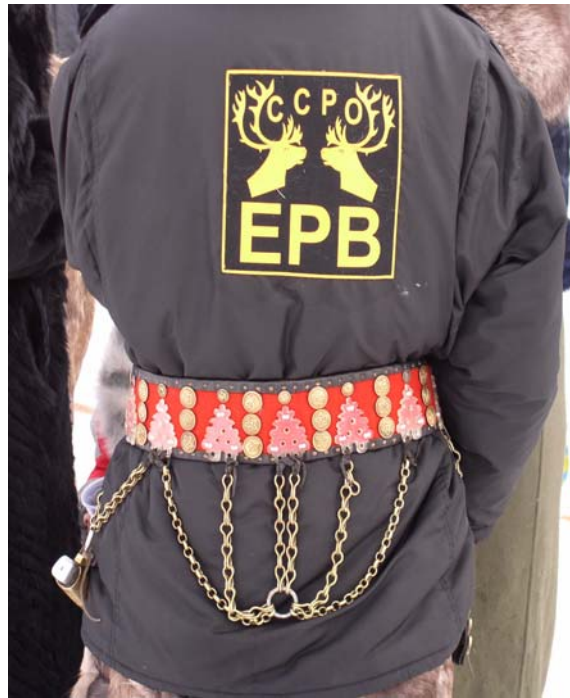
From what has been stated above, it is obvious that nowadays Varandey is not officially registered as an inhabited settlement, meantime the Nenets Autonomous District has the nomadic population and the Varandey tundra is a territory for the traditional land use of the Nenets – reindeer herders – in accordance with customary and regional law.

The land areas necessary for enlarging the terminal belong to the State, although it was permanently leased to the “**Erv**” reindeer herding cooperative.⁵⁸

⁵⁷ Snyder R., Williams D. & W.Peterson 203: p.109.

⁵⁸ “Erv” means “master, owner, host” in the Nenets language.

Picture 8 *The costume of a Erv reindeer herder with the traditional Nenets male belt*



The “Erv” reindeer herding cooperative was established in 1992; at that time, the process of privatisation in Russia began and several reindeer herding families decided to leave the “Harp” kolkhoz and become private owners. They received their share of reindeer from the kolkhoz and a plot of land was allotted for herding by the State. The people of this newly organised farm were not strangers to the place – most of them had been born and grown up in the Varandey area, as had their ancestors. In 2003, 39 household and 140 people owned about 9,000 reindeer.⁵⁹

Currently, the land leased by “Erv” from the State (about 700,000 hectares) is legally recognised as “*territory of traditional land use*”.

⁵⁹ *The number of reindeer could vary from year to year*



Figure 11 The boundaries of the territory of traditional land used by the “Erv” cooperative of reindeer farmers

The purpose of creating special territories for traditional land use was to protect the primordial subsistence, traditional way of life and original culture of the few indigenous peoples of the North. The legal status of the territory of traditional land use is stipulated in the *“Regulations about territories of traditional wildlife management of indigenous peoples of the North”* and was authorized by decision of Administration of the Nenets Autonomous District, No 1025 dated 29 December 2001.⁶⁰ According to the regional legislation, traditional crafts and subsistence on this territory are a priority. All industrial operations in this protected territory are limited and should be carried out only with consent of the people and communities of indigenous peoples of the North or their representatives.

⁶⁰ Sbornik materialov po olenevodstvu Nenetskogo avtonomnogo okruga. Naryan-Mar. “Lukoil-Naryan-Mar”. 2003.

5. The oil marine transportation system: overview of possible impacts and socio-cultural indicators

The following part of the report deals with the complexity entailed in the various impacts of implementing the oil sea transport system. The data from the fieldwork demonstrate that the Nenets people are deeply concerned about the sustainability of their natural environment, which may be affected not only by tanker transportation but also altered by the coastal facilities and could affect:

- i) Water resources
- ii) Land resources

***Picture 9** Portable water taken from the river
(Viucheskoe village Nenets AD)*



5.1. Impact on water resources

For the local inhabitants of the district, the ecological condition of ice and sea-river system, the purity of water resources as a common heritage, is of vital importance.

The inhabitants of the rural area are as well concerned about the reproduction of fish and waterfowl, but since they are not provided with information from project-planners on the frequency and exact routes for current and future sea navigation and with data from ecologists about dynamic of fish resources, the opinion of local peoples is based mainly on their own experience. For example, there was an oil spill in the vicinity of Dolgii Island (Dolgii Island is situated in the Barents Sea not far from Varandey and is part of the Nenets National Reserve) for which no one admitted responsibility. One reindeer herder wondered, *“If environmental safety is announced for the future, why doesn’t it work now? Who will be responsible for the spill of oil in the sea?”*⁶¹

In the Nenets Autonomous District, State control over marine nature management and environmental protection is executed by the Specialized Marine Inspection of the RF Ministry of Natural Resources. Jurisdiction of the inspection unit covers 800,000 sq. km of water area including 3,000 sq. km of the Barents Sea coast. However, Marine Inspection has no ships and it acts within its limited budget: in 2002, with a staff of only three inspectors. To perform even planned control, the inspectors have to ask companies to provide them with a helicopter ride or they use the occasional possibility to carry out spot checks together with Frontier Guards or they join other parties. An officer from the Sea Inspection confessed that the provision of control in such poor financial conditions might only be at the surface level because it was possible to rarely check up on more than fire safety. Therefore, the Specialized Marine Inspection currently confines its activities to the coastline and Pechora estuary only.

5.2. Impact on land resources

⁶¹ Field notes, Varandey tundra, Nenets AD, 2004.

An additional 10,064 hectares of the land are required in order to enlarge storage capacity, pumping stations and other terminal facilities (9,287 hectares of which, according to the official documents will be taken from the pasture lands used by the “Erv” reindeer herding cooperative).⁶² Officially, the cooperative will be reimbursed the loss of possible profits, but the reindeer herders are concerned about how the company would interpret this agreement and apply it in reality. (Data from interviews indicate that there are cases where activities were carried out to enlarge the terminal without an official permit and without prior agreement or with non(-)observance of the statements of agreement (the sand quarry on the Varandey tundra, at Pilnya Lake and Peschanka River).⁶³

Not only the reindeer herders but also officers from the Land Utilization Committee confirm that despite the officially accepted land allotment, the size of which is relatively small in the documents, the plots of land cut are larger. Such a situation is common in other places of the Russian Arctic.⁶⁴

Two principal reasons explain this:

- i) *Construction is accompanied by different types of pollution: chemical, noise, debris, etc. All these spread, and the land becomes useless for the traditional needs of the local inhabitants.*

Picture 10 *Used barrels by the Indiga River*



⁶² Technical substantiation of Varandey terminal.

⁶³ Interview with Khabarov P.A. (director of the koophoz Erv), Field notes, Naryan-Mar, Nenets AD, 2004.

⁶⁴ Khrushhev S., K. Klokov 1998. p. 29.

ii) A company constructs its facilities on a plot of allotted land but the infrastructure's (roads and pipelines) cuts through and makes inaccessible other parts of the vicinity, which usually are not officially allotted.

Picture 11 *Pipelines cut through the reindeer migration route
Varandey tundra*



Photo from the Association of Nenets People Yasavey archive

An example from the Varandey coast illustrates the second statement: a huge area of about 20 thousand hectares of pasture became inaccessible after a pipeline from Myadsei deposit to Varandey terminal had been laid. That happened because a lack of information and little interest about local needs. An employee from the Naryanmarneftegaz Company said in an interview, pointing to a map, “*Look here, to the Varandey coast! Who can we disturb? There is nothing at the place but bogs and grass covered with water. It’s not pasture!*”⁶⁵

⁶⁵ Field notes, Naryan-Mar, Nenets AD, 2004

Reindeer herders think differently about the coastal lands and consider the seaside halophyte meadows as valuable pastures. The reindeer eat grass, which is rich in both nutrients and salt, and then they quickly gain weight. What the more such pastures are often shrouded in sea fog and frequently, cold winds pass over them, which helps animals to escape biting insects and also favour for the good and calm pasturing.

Figure 12 *Current and planned pipelines in the Varandey area*



V. T., the wife of a reindeer herder from a family that has pastures along the Barents Coast spoke up,

“The reindeer get fat during the beginning of the autumn, but they need to have some reserve energy stock for the coming winter. That’s why till recently we always went for about two weeks to the coastal pastures in October. The grass is salty there and the reindeer like it, and they fatten up very quickly. We call this kind of pasture “tamb”. But it’s now been 3 years since access to this pasture has been cut off by the pipeline, so we have to turn back and migrate our herds far from that place.”⁶⁶

⁶⁶ Field notes, Varandey tundra, Nenets AD, 2004

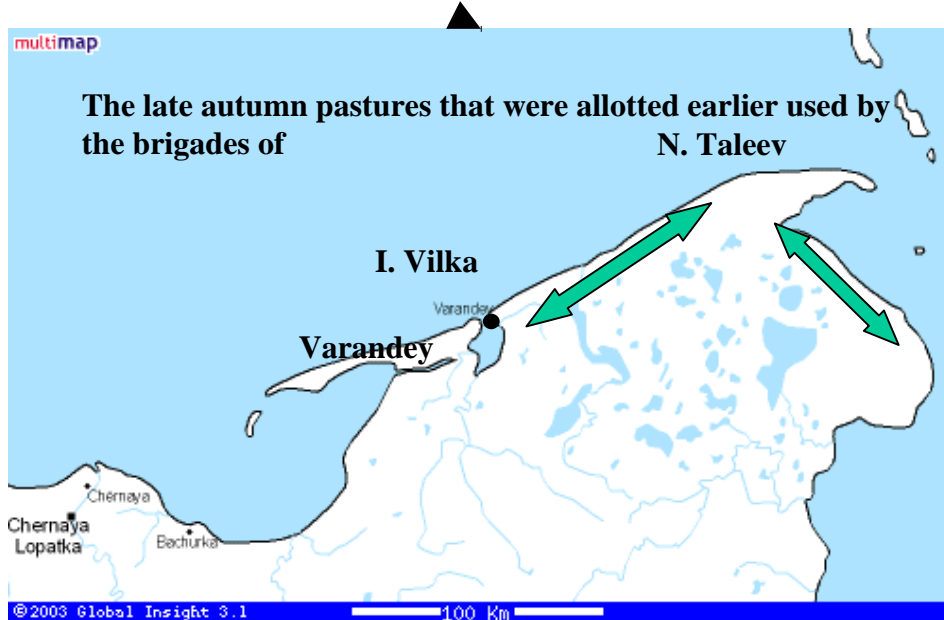


Figure 13 *The territory of common use*

The head of another family, T. N., added:

“Now listen! Why are the coastal pastures so important? One reindeer should be fat enough for slaughtering while the other one should live through winter and survive during the hard spring. If a reindeer eats only one type of food, like lichen, it will take some fat, though it will lose it quickly. To reach a better state, it should have alternating fat and meat layers under its skin and we have to change pastures for this. The salty coast pastures are the best before the preceding winter frosts in October; the reindeer really love it.”⁶⁷

The situation became complicated in 2001. Because of the unofficially allotted by companies pastures, the reindeer herders delayed giving permission for using additional lands needed for further construction. In response, the oil company took some land and began construction without official permission. These in turn resulted in a number of consequences (the loss of taxes for the regional budget, the poor responsibility of the company for the condition of unofficially allotted lands, etc). The conflict between land users was sharp but in the end (after many hours meetings and discussions) the oil company (at that time it was Varandeyneftegas)

⁶⁷ Field notes, Varandey tundra, Nenets AD, 2004

constructed special passes for reindeer. This could have been done from the very beginning, if early consultation with the indigenous peoples had been considered an integral part of construction planning.



Picture 12 Pipelines in the Varandey coastal area

6. Indirect and cumulative impacts of oil crude sea transportation

6.1. Possible negative consequences

Disabling the use of one specific pasture (such as the autumn coastal pastures) results in changing the cycle of pasturing. This means that reindeer herders are forced to look for a new plan for seasonal migrations, because:

- i) Practically all lands suitable for reindeer breeding are distributed between reindeer enterprises.
- ii) The choice of pasture land should meet a number of mandatory natural requirements: there must be suitable places for extended stops, places for watching herds, a good water source, resting places and safe places for spring calving. (For instance, the best watering places are lakes or running

rivers with dry shores and no miry bottom; marshes are not good, they have stagnant water; the same can be said about small grown-over lakes with swampy shores: They do not fit requirements).

Field data and literature on SIAs shows that the phase *even before active operations – construction – is of no lesser importance* and it actually may often cause many impacts on the economic and social well-being of the local and indigenous peoples.

Herders state that most impacts they suffer from come from the company's unpreparedness for accidents, from violation of the law and disclaiming responsibility.⁶⁸ A Nenets herder who has pastures in the close vicinity to Varandey terminal states:

“During the winter of 2002, a big tractor sank in the Peschanka canal on Varandey tundra, which resulted in lots of crankcase oil being leaked. So now, there is no fish in the Bolshoi Toravey lake.”

Herders contribute to local sustainability, but there are an alarming number of oil spills or other violations of environmental norms, even changes and mutations in local flora and fauna. Actually, the reindeer herders who migrate along the oil pipeline and coast are often the first /or the only ones who react to violations against the ecology.

6.1.1. Possible indirect consequences of social character

The social, economic and biophysical constituents of human well being are closely and tightly interconnected. The good practice of an SIA must develop an understanding of the impacts and chain reaction across the domains.⁶⁹ Data on social impact assessments within the INSROP project stresses that the influence of the NSR upon indigenous peoples is revealed not solely in the direct effects of marine transportation but also in the indirect and cumulative effects of the industrial development on the northern territories.⁷⁰

⁶⁸ See also Forbes B. 2004.

⁶⁹ Vanclay F. International principles for Social Impact Assessment. Impact assessment and project Appraisal. March 2003, p. 6.

⁷⁰ Anderson D.G. 1995; Boyakova S.I. 1996: 2.

Indirect impacts can bring changes in the local social and economic systems. For example increased gap between income of the the local population and the seasonal terminal staff. In 2004, the average salary for the oil industry workers came to 27,000 roubles compared with 5,500 for agricultural workers (in reality the difference is much more).⁷¹ An increase in income per se is positive factor but if to take in account that prices in the regional centre (especially for real estate) are increased also and suit only those groups with high income and exacerbate social differentiation. For example, in 2003-2004, a two-room apartment in Naryan-Mar cost 1.5 million roubles⁷²; clearly, it is impossible for a reindeer herder to buy a flat. Additional social programmes must be implemented in order to bridge this gap.

Many important aspects of the social environment are not strictly economic or quantifiable. For instance, the way people interact with the environment, their environmental ethics and norms may be of critical importance to the identity of indigenous communities. ***This kind of data does not apply to simple counting, though it should certainly be taken into account.***

The tundra area, lanscape, its flora and fauna, is more than just a place where the Nenets people live. The tundra is the keystone of their world outlook. A hill, a sand peak or a weirdly shaped lake and other natural beauties, might be a sacred site (“hebidya ya” – “sacred land” in the Nenets language).⁷³ Different places may be holy for all the Nenets; other spots may be sacred only for a clan or a family. For example, Vaigach Island is sacred for all the Nenets; Seven Headed Hill is sacred for inhabitants of the Varandey tundra. Places of burial – “Khalmer”, are situated on the tops of high hills and considered not only sacred but also land-markers that show which clan or family it belongs to. In the Nenets culture, the destruction of the burial sites of ancestors is a huge sin because this cuts off the spiritual connection between ancestors and descendents.⁷⁴ Hundreds of stories still live in the memory of the people. These stories tell about character of a sacred place; such things make a link between the old and the young and tell a lot about environmental ethics to younger generations.

⁷¹ Izmailova M. 2004 (a).

⁷² Izmailova M. 2004 (c).

⁷³ Kharychi G.P. 2001: 81-196.

⁷⁴ Gulevskiy A. N. 1993:121-128.

The special status of sacred places and cultural monuments is recognized in the Law of the Nenets Autonomous District about Territories of Traditional Land Use of Indigenous Peoples of the North (Section IV, 4.1). According to the law, any industrial activity in the tundra should take into account places of cultural and historic heritage. Some difficulties pertain to the issue: the Nenets culture specificity forbids revealing the location of sacred places to strangers; thus, information on the location of such places is kept secret and it is often shared only among the members of a community. Mutual respect for traditions and cultural nuances is important but for the future development, it will be necessary to make a cautious mapping of such places in order to avoid damage and disruption by non-natives.⁷⁵



Picture 12 *Nenets traditional cemetery and oil storage
in Yamalo-Nenets autonomous region*

The removal of lands without appropriate mitigating measures and social programmes could arouse a number of negative effects that tend to become cumulative; it is a well-known fact in the history of the Russian Arctic. For example, if the reindeer herders from “Erv” cooperative farm are ousted from their habitual sites they will be compelled to migrate closer to neighbouring territories (in

⁷⁵ The conservation value of sacred sites of indigenous peoples of the Arctic: a case study in Northern Russia. Report on the state of sacred sites and sanctuaries. October 2002. CAFF Technical Report. No 11. Draft.

this case, the neighbours of the “Erv” are two farms: “Izhemsky Olenevod”⁷⁶ and “Kharp”). Currently, the herders have a friendly relationship with each other but in time, there may be tension between the herders from different enterprises and this may lead to tensions between individuals and eventually have a negative impact on the psychological climate and everyday life of the villages. Such cases are known both in the Nenets and in the Yamalo-Nenets Autonomous Districts.⁷⁷

New difficulties can lead to a situation where groups of reindeer herders may lose the opportunity and desire to continue their activities. In this case, they would be compelled to change their way of life and habits and settle down somewhere. This would lead to changes in the life of the local community.

There are groups of reindeer herders who have no permanent houses or apartments in villages; thus, their unexpected re-settlement without an appropriate housing policy would lead to overcrowding in the existing private dwelling fund. It is a well-known fact that deterioration of dwelling conditions affects people’s state of health (non-observance of hygienic norms in houses leads to epidemics of social diseases such as tuberculosis). In 2003, 29 reindeer herders’ families had no permanent home in Krasnoe (24 families were from the “Erv”).⁷⁸

Another consequence is that those reindeer herders who are compelled to leave the tundra will face the harsh reality of being soon unemployed, which is especially bad among inhabitants of small villages. For the people of working age (especially for men), the impossibility of obtaining a job that can meet one’s needs and requirements means the loss of the meaning of life and the impetus to live (living on pensions and children’s grants or relatives, or on humanitarian aid does not promote the true development of a person). In 2003, 1,096 people were registered as unemployed in the Nenets Autonomous District, 411 of them representing northern indigenes (36.4%) (percentage of unregistered unemployed is high especially in the villages).⁷⁹

The sharp change of the way of life has had negative consequences on the health of the indigenous peoples. The medical study in the Yamalo-Nenets

⁷⁶ *The area of 4045588 hectares in NAD is in long-term use of the Komi Republic farms.*

⁷⁷ Leont’ev A. V 2002:1.

⁷⁸ Data from interview with director of Erv Khabarov P.A.

⁷⁹ The data from the Department of Employment of the Nenets AD

Autonomous Region showed that cardio ischemia was 2.6 times more common among indigenous peoples settled in villages than among the indigenous nomadic population in the tundra.⁸⁰ As shown in the previous section, it is not easy to adapt to a new way of life. Mutually constraining factors intertwine with each other, making it difficult for a person to plan for the future (a passive life leads to other negative consequences, the most serious of which are alcoholism, deviant behaviour, suicide etc). In 1987, the death rate for people of active age in the NAD came to 39% of all registered deaths and 10 years later, in 1996, it raised to 47%.⁸¹

Table 4 Cause of death in the Nenets AD⁸²

	1997	1998	1999	2000
Total number of deaths	427	435	433	531
Caused by				
Disease connected with blood circulation	233	221	221	260
Trauma, poisoning and accidents	100	111	98	137
Neoplasm	54	67	65	67
Disease of the respiratory apparatus	14	11	10	12
Disease of the digestive apparatus	9	3	11	13
Infection and parasitic [invasion] diseases	4	6	6	7
Etc.	13	16	22	35

The death rate among adult men is 4.5 times higher than that of women.⁸³ It could be explained that the process of adaptation for women is easier because they would also be busy taking care of home and children in any other place. For a Nenets man, professional life is traditionally linked to the tundra environment, and finding a new meaning in life is always a challenge.

⁸⁰ Buganov A.A. 2003: 46.

⁸¹ Apitsin A. 1997: 390-395.

⁸² Nenetskii okrug za 70 let. Kratkii statisticheskii spravochnik. 1999.

⁸³ Ryabikov A.D. 1997: 390-395.

6.2. Possible positive consequences

In analysing positive impacts, it is important to be confident that thorough consideration is given to interests of a group influenced by negative impacts. Expanding oil sea transport operations can have positive indirect impacts on both the indigenous and other local population.

Oil transportation and oil extraction are interdependent vectors of development. For the Nenets Autonomous District, oil transportation is one of the key tasks for further development of the hydrocarbon extracting industry. *What benefits can bring expanding the extraction and transportation of oil to the local indigenous community?*

The oil companies operating in the Nenets Autonomous District have several financial obligations: to pay taxes for the use of land, for the profit they receive and for environmental damage. Four per cent of the oil company's income goes to the regional budget and it is distributed according to the regional programme of development.

A State Fund for Support and Development of Northern Indigenous People was also established in the Nenets AD. Its budget comes from 4% of severance taxes, contributions of legal entities, persons and other sources. The fund is allocated in accordance with certified programmes and events geared to:

- a) Developing national culture, education and sports.
- b) Supporting the traditional economy.
- c) Supporting indigenous intelligentsia and entrepreneurs.
- d) Financing residential construction projects for minorities of the North.
- e) Promoting the social and economic development of the minorities of the North, including financial and humanitarian aid.

Measures, elaborated by the regional administration, have some positive impacts on the Nenets people. One of the most visible successes is the result of the Support of Reindeer Husbandry programme (supported by the regional budget).

The compensation for the delivery and transportation of meat products paid in accordance with the programme has a positive impact on the development of reindeer husbandry. In the Nenets Autonomous District, most reindeer meat is transported to consumers by air but the cost of this is too high for producers (in 2004, it amounted to 45,000 roubles or about 1,300 euros for a one-hour helicopter flight). Since the late 1990s, 80% of the transportation costs for meat products have been met by the local budget.

Another important measure is compensation for reindeer husbandry production losses. Due to market conditions, the price for reindeer meat is relatively low in the Nenets District. To cover this loss, herders are subsidized for each kilo of meat sold (in 2002, meat subsidies were set at the level of 44.50 roubles if sold to a meat factory, 35.90 roubles for venison sold to State-financed organizations, and 16 roubles for venison sold to other organizations and companies).

The head of the Reindeer Husbandry Department of the Agricultural Committee of the Nenets Autonomous District said that the increase of reindeer stock in 2003 (the number of reindeer in the Nenets AD totalled 128,213; it rose by 3,606 when compared with statistics for 2001, which showed 123,347) was the result of several factors, the main one being the financial support of reindeer husbandry and the adoption of the regional law on reindeer husbandry.⁸⁴

Besides the authorized payments by the oil companies to the regional budget, existing relations and agreements between oil companies and reindeer husbandry enterprises can provide concrete benefits and positively impact on current condition of reindeer husbandry.⁸⁵

⁸⁴ *There were also regional subsidies for the needs of reindeer husbandry (relocation and construction of corrals, purchase of equipment, radio sets for communication with remote brigades, etc). The programme covered also reindeer diseases and natural hazard insurance (2.2 million roubles) and protection of reindeer from predators (3.5 million roubles).*

⁸⁵ Taleeva V. 2002: 184-186.

Picture 13 *The VarandeyNeftegaz Company sought agreement with ERV. Label on the box with goods: “Varandeyneftegas to the herders of the “Erv” cooperative farm”*



Indemnification for land withdrawal and the associated inconveniences.

1. Helicopter flights for the needs of reindeer herders.
2. Social programmes for settlements of reindeer herders (for example, house building).

There are many cases of such negotiations between companies and reindeer husbandry units in the Nenets Autonomous District.⁸⁶

Coastal industrial operations can have other benefits for the area's reindeer herders. The need is to integrate reindeer husbandry into the market economy. The terminal staff can be end consumers for reindeer meat. For herding enterprises, it is more convenient to slaughter and deliver meat to consumers who are as close as possible to the autumn pastures when reindeer have a good weight.

⁸⁶ *It is important to be aware of the possible pitfalls of this kind of relationship. Some companies granted gifts and other benefits to reindeer herders at the time they were seeking agreement with reindeer herders on the allotment of land, without intending to establish a long-term relationship.*

During the autumn of 2003, two brigades of the “Erv” sold 10 tons of reindeer meat to the Varandey terminal, the herders benefited from that deal.⁸⁷ The scheme is also beneficial for the terminal’s employees because they can eat fresh meat instead of frozen (actually, many times frozen and re-frozen) products delivered by helicopter from the South.

It is important to note that quite often, the local people have claims to environmental policy and the attitude of a company but at the same time, on the individual level, many herders point out that friendly contact with oil industry employees during the seasonal migration is a positive feature with respect to the development associated with oil. The Nenets and Komi herders used to visit oil deposits to borrow or barter tea, fuel or spare parts for diesel engines, etc. Even the possibility of direct human contact was mentioned as a positive feature:

“When they [companies, N.M.] respect nature, then we do not object to their presence, especially during the dark time of the northern winter. We suffer from a lack of outside contact and it is nice to visit people and to have interesting talks with them”.⁸⁸

Picture 14 *Representative of Varandeyneftegas Company with reindeer herder in Varandey tundra (photo from “Erv” archive)*



⁸⁷ Field notes. Nenets AD. 2004.

⁸⁸ Field notes. Nenets AD. 2004.

7. The future perspectives related to the social impact assessment of sea transportation and associated infrastructures on Arctic Russian communities

7.1. Indigenous position in change

In practice, industrial projects can face quite many unpredictable factors. Any particular situation usually depends on a number of factors: current changes in economics and politics may often lead to consequences that could hardly be foreseen in detail during only one phase of social assessment. That is why it is important to make it a rule that a specific SIA should be prepared for each project and the possibilities for further monitoring different stages of the project should be maintained.

It is a well-known fact that any pressure on the vitally significant natural and social environment inevitably encounters reaction from indigenous peoples whose self-esteem and general positions strengthen with time.⁸⁹ After obtaining personal and international experience, indigenous peoples turn from some sort of “asking for benefits” position to strict demands in order to establish control over the lands of their traditional use. Any society reacts to changes and adapts to them, but it also is capable of producing an active influence upon the dynamics and the vector of development. This is a distinctive feature of society. The following example is from another northern country, Canada. The ratification of numerous industrial development projects in Canada went parallel with comprehensive land claims negotiations and the creation of the Nunavut Territory. Stimulated by imminent profits from the oil and gas industries, the government took more care considering the demands of the indigenous people in order to safeguard itself against further court cases. Inuit participation in land demand contracts, special sessions conducted in accordance with the environmental impact assessment procedures, signing of agreements for planned use of lands and Inuit Circumpolar Conference have made the political consciousness of Inuits considerably more active. Several years were enough for the development of Inuit capability to interact with a whole complex of government institutions and regulation processes in Canada in order to defend their

⁸⁹ O’Faircheallaigh C. :1999: 63-80.

political interests and constitutional rights.⁹⁰

Actually, the sharp conflict between “Erv” and “Varandeyneftegaz” in 2001–2002 (the company that at that time was the most active in the Varandey tundra) became a catalyst for the public discussion in the Nenets Autonomous District and attracted the attention of other reindeer husbandry enterprises, oil companies and representatives of the civil society. The Association of the Nenets people “Yasavey” and “The Union of the Geologists and Oil Workers” formed a working group to solve the problems of the future development of the oil industry in the district. Both reindeer herders and representatives of the oil industry participated in various activities and showed interest in reaching consensus: since 2001, the Round Table concerning the future of reindeer husbandry and oil industry in the Nenets AD has been held annually.

A seminar “Reaching and Following Agreements in Implementing Mineral Resources Exploitation Projects” was held in Naryan Mar on 14-16 May 2003, which discussed the possibilities for mutually profitable relations and cooperation between the indigenous people’s traditional way of life, oil-producing companies and regional administration. Representatives of the reindeer husbandry enterprises and oil companies were among the participants. Representatives of Canadian Institute of Natural Resources Law, who coordinated this seminar, shared their experience in interacting between the indigenous people and mineral resources users in Canada and on legislation in this sphere. Consequently, future industrial development could not ignore the reactions of indigenous peoples on different levels of regional, national or international powers.

⁹⁰ Transit management in the Northern Passage. Problems and prospects. Ed. By Lamson C., Vanderzwaag D. 1986:56.

Picture 15 Round table in Naryan-Mar discussion about future of oil industry and reindeer herding



7.2. Mitigation measures

One of the most important tasks of the social impact study is to highlight the mitigation measures that should be thoroughly studied in order to minimise any future harm and maximise benefits from planned and ongoing activities.

Actually, the list of possible mitigation measures that the local inhabitants and reindeer herders discuss is long and quite detailed and it should emphasise concern about their future. They suggest that the measures should not only be for the short-term but rather promote long-term effects. The main principles for all the measures are:

- Direct early and continuous consultation with communities during all stages of the industrial activity and its planning.
- Strict adherence to the existing environmental laws and regulations.
- Fulfilment by the companies of their obligations toward local communities.

Listed below are some details concerning the possible mitigation measures mentioned by reindeer herders. All of them are cases for the general principles mentioned above:

1. At any stage of planning a network of oil pipelines, it is necessary consultation reindeer herders about the passes for reindeer and both parties should discuss the pipeline parameters (height, width, etc).

2. Construction of a *faktoriya* (intermediate base, trading supply, mini-plant for processing raw material from reindeer husbandry, base of rest, social, medical and other services for the reindeer herders in remote areas) could favourably affect the economy of reindeer husbandry in the district. A faktoriya with a mini processing plant could provide appropriate conditions for reindeer slaughter and enable long-term storage with subsequent realisation (meeting EU standards) for meat production both for domestic and foreign markets. This could effectively help integrate the indigenous population into the market economy, create additional working places for the natives, increase efficiency and economic profitability of reindeer herding enterprises.

“Before the village of Varandey was abandoned, reindeer herders coming to that district during the autumn migration had the possibility to sell meat and buy food in the village as well to use medical help and visit the local post office. Now they’ve lost it all. At present, the herders from the “ERV” often have to move their reindeer herds from autumn pasture to the slaughtering place and it takes a longer time because the distance is also longer (it is undesirable, for the animals lose their weight). A post with a slaughterhouse construction somewhere on the migration route could solve technological, social, cultural as well as trading and purchasing problems. Such a point should be adjusted by several reindeer herding enterprisers to proper serviceability for everyone. It is convenient for several reindeer farms (“Izhemsky Olenevod”, “Druzhiba Narodov” and “Kharp”) to place the facility on the Pae Yaha (Stone River) junction of the rivers Chernaya and Sada Yaha. The physical characteristics of the site must also be taken into account (soil, topography).

This faktoriya may help provide reindeer herders and hunters with food (the first with the high quality products of reindeer husbandry, fishing and hunting, the latter with food and the most necessary goods). Besides, the trading post could create additional working places for the indigenous people”.⁹¹

3. The programme of training and the creation working places for the youth from small villages is important. Currently, unemployment is the critical

⁹¹ Field notes: Interview with vice director of cooperative farm Erv - Alexandr Viucheisky, Krasnoe, Nenets AD, 2003.

issue in the small villages of the Nenets District. If special programmes for the local youth are elaborated, it could have additional social benefits. For trained local people (not only indigenous), it would be easier to work in shift brigades because the climate and regional specifics are more familiar for them; they would not need to adapt and readapt, as southern migrants should. The local people take more care of the local nature.

4. Industrial constructions in the tundra should be erected only after thorough investigation as to whether the chosen place is a sacred native site.

The specific list of mitigation measures should be updated with the passage of time as situation at the place of active development changes.

7.3.Future impact.

The future impact of the oil marine transportation will vastly depend upon the place accepted for the location of the terminal. Each scenario should be done together with social impact assessment based on the specific technical data for each project. It is possible to predict the general features of possible impacts but the scenarios will vary. They may differ, starting from the initial point and ending with various accompanying circumstances.

The Varandey terminal already exists in the Nenets AD and the Svyatoi Nos terminal is under discussion. Indigenous and local peoples have a realistic point of view, expressing it in a statement that “what was done already is done” (which means that huge financial investment was expended on the terminal and its infrastructure and that regardless of their opinion, it will not be removed). The local people considered that the best in this situation is to look for the points for future mutually beneficial agreements and coexistence.

The reaction on the local administration’s proposal for the Svyatoi Nos scenario is different. An overview of the mass media data and interviews gave the notion that many questions for this project are without an answer. A public hearing on the Svyatoi Nos terminal was held in October 2004. The peoples asked, “Is it really necessity? How can local interests be protected and guaranteed?” Many questions still were without an answer.

Some inhabitants of the village of Indiga, who are not tightly linked to reindeer husbandry, have expectations for positive impacts on their life, if this

scenario is accepted. They hope that the benefits would not be concentrated only in the region's capital but also could be enjoyed by the villagers. They hope that terminal will increase their opportunities for employment (meanwhile an officer from the Department of the Nature Committee of the NAD administration said that for the terminal construction will hire mostly qualified workers from other parts of Russia). However, even those who support the idea of the Svyatoi Nos terminal are anxious about fishing resources – the main source of subsistence for everyone in the village (Nenets, Komi, Russians, etc.).

Their opponents argue that in this scenario, the pipeline connecting the terminal with oil deposits will cross the territory of the region for more than 450 km and this will impact not only the well-being of the Indiga villagers and reindeer herders of the Indiga SPK but also on the interests of other reindeer enterprises of the Nenets Autonomous District (OPH, Nyaryana Ty).⁹² The proposed pipelines and roads will cross the Pechora River and other spawning rivers and the assurance of the local authority that the construction will be accomplished in an environmentally safe manner did not convince the local population, who have had quite the opposite experience.

The local people from Indiga showed places on the coast and in tundra filled with tonnes of rusted metallic constructions. In Indiga, they named it “Kurskaya duga” (the place of the famous tank battle during the Second World War, when hundreds of destroyed tanks were scattered all over the field of battle). These metal constructions on the tundra and coast are evidence of the intended activity, the result of suddenly changed State policy or financial crises. Many locals consider that before they are implemented, the plans should be carefully elaborated.

In other words, the local people expect benefits from the oil industry and oil marine transportation but in the meantime, they worry about the natural environment they depend on. Benefits seem possible but uncertain, disturbance to nature is very well known. The head of the reindeer-herding brigade shared his thoughts: *“We should think about heritage and be concerned about the future, which we don't know yet. We experienced how political and economic changes*

⁹² Izmailova M. 2004 (b)

reflected on our life. OK. I can earn money today, buy something, and let my land be destroyed, but if internal and external policy are changed tomorrow whereas the oil price changes, what if all oil workers abandon the site? We will stay here and face our disturbed environment. My son and his descendants won't feed themselves from the land and will have nothing in the other world."

Actually, the companies' contravening its internal rules and day-to-day deviations from environmental norms together with other unsolicited impacts that oil workers might cause without proper control (liquor barter, reindeer and fish poaching, abandoned dogs) could be cheaper for the company but will lead to numerous problems and conflicts in the future. Many international companies in Russia and companies that work with the support of the EBDR understand this. Published and field data provides information about examples of friendly environmental and social policies of joint international ventures at the Ardalin oil deposits. Another example comes from the Yuzno-Shapkino oil field, which is operated by the SeverTEK Company (a joint venture created by the Finnish corporation Fortum and Russia's Komitek). SeverTEK received a loan from the European Bank for Reconstruction and Development. According to the agreement signed with the EBRD, the company has to make an annual report to the bank's experts about the implementation of social and environmental programmes. SeverTek observes strict regulations for the staff, which includes prohibiting bringing guns, fishing nets, dogs and alcohol to the deposit and the company also bans hunting, fishing and private bartering with reindeer herders. The principle of protecting cultural diversity does not often has the same priority as biological diversity. But industrial activities if regulated with participation of indigenous communities would be subject to more stringent environmental protection in order to allow the local subsistence based economic activities co-exist.⁹³

⁹³ Osherenko G. 1992: 115-132.



Picture 16 Working group: Indigenous peoples and Oil extracting companies in Nenets AD

8. Conclusion

The marine oil transportation in safe and economically profitable manner and is important for the future development of EU and Russia, it have international, national and local levels of impacts. The social impact assessment considers not only the consequences of vessel operations but also the impact of the terminal and its infrastructure on local communities. (Loading, pumping and storing area together with tankers, icebreakers, etc. is an indispensable and integral component of the oil marine transportation system in the Arctic). The main consequences for the local peoples are derived from activity (shipping) on the sea and activity in the coastal area (different stages of terminal construction and operation). Both positive and negative impacts could be direct, indirect and cumulative with time.

In the Nenets Autonomous District, the positive indirect impact from the oil marine transportation is connected with the future increase of oil extraction and its result in swelling revenue for the local budget. These positive changes are very welcomed by the inhabitants of the NAD, but to optimise the benefits from the oil transportation, additional measures and social programmes are required.

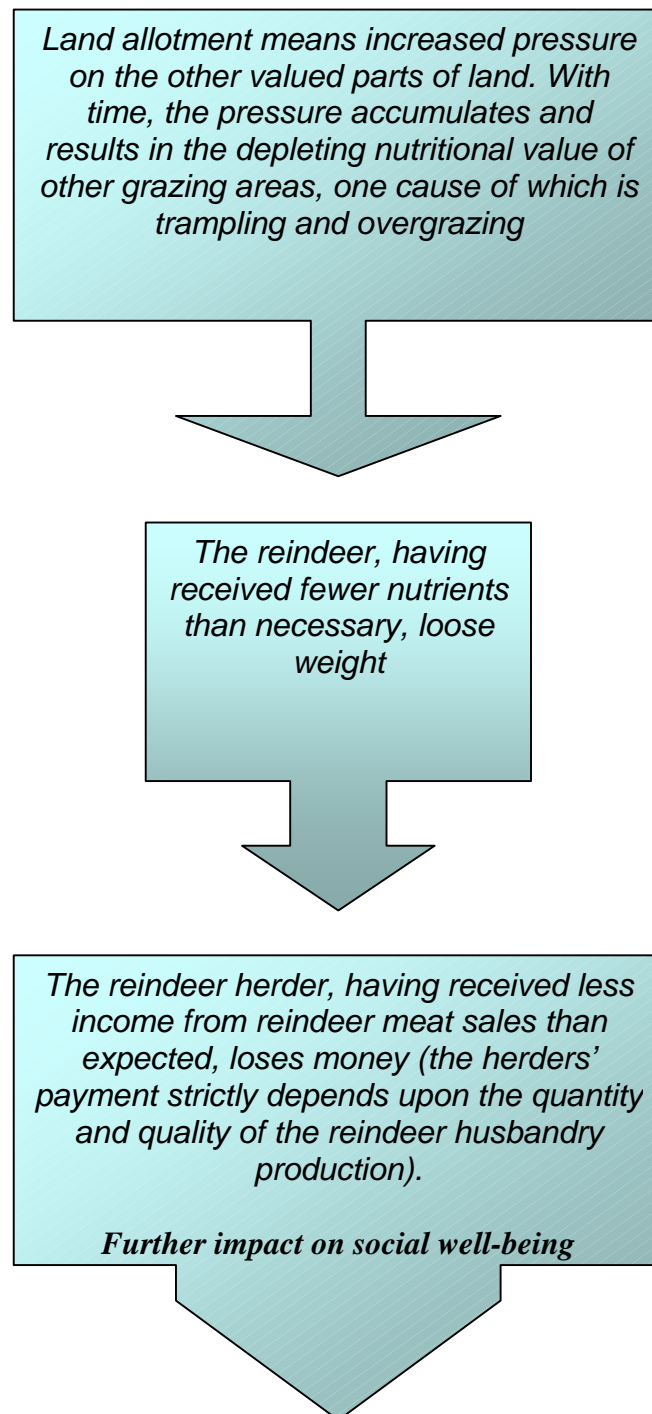
The possible changes would impact on the very basis of local traditional occupation: fishing, waterfowl hunting and reindeer husbandry.

Interviews with local inhabitants and the good examples of the Ardalin and SeverTek companies in Nenets Autonomous District demonstrate that negative impacts are not an inevitable and inherent condition of industrial operations. Importantly, frequently negative consequences are caused by ignoring timely and permanent consultation with the indigenous and local inhabitants and interested parties. Another source of negative impact is infringement of the existing regional and environmental laws, norms and other regulations. This is especially true when environmental control over industrial operations is inefficient.

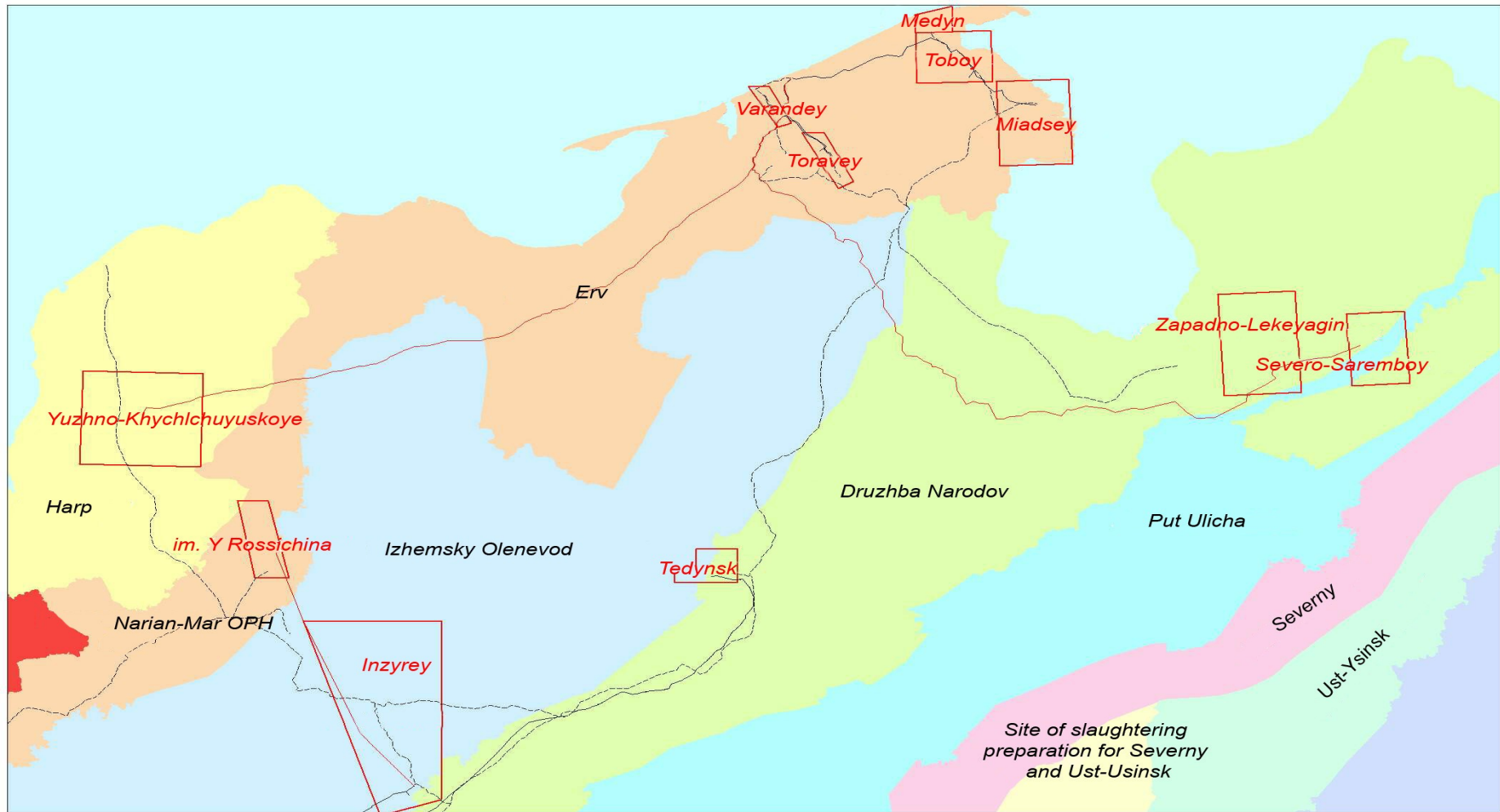
The Arctic is a zone of mutual international interest and businessmen, policy makers and representatives of civil society could contribute to positive change by focusing their attention on the environmental and indigenous perspective of each project and on each phase of the project's implementation.

The contribution of Arctic international organisations in building the capacity of northern indigenous peoples in Russia will serve to strengthen their position and increase their possibility to participate in co-managing large industrial projects (such as oil marine transportation). Equal open dialog between all interested participants and actors will serve to increase trust and mutually beneficial cooperation.

Figure 14 *Consequences of the land allotment*



Reindeer husbandry cooperatives and oil production sites location



Appendix 1 Interviews

1. Male (Nenets) - lives in town, has high education, works for the local administration.

“I don’t object to industrial development in the district, but we should think of the future. What will we have in quite a short historical time, in 100 years, when oil stock is exhausted? If we speak about Varandey, then I would say that there were official and not-official versions of people’s resettlement from the village. Actually, the history of New Varandey and the area is the history of an irresponsible attitude to nature. The area’s environment was spoiled – the fish and the animals almost disappeared, people lost the basis of their subsistence. During the economic crisis of the 1990s, people lost their jobs as well. No one saw any opportunity of finding a job, perhaps start working for the terminal (several persons did so).

Therefore, I think, there are two sides of industrial development in the Nenets AD:

1. The regional budget gets revenue, which is good for socio-economic development and gives the possibility to plan. We may collect and use funds to revitalize reindeer herding enterprises (purchase nets for corals, tarpaulin for nomadic homes (chum – sing.), etc.
2. Nevertheless, it leads to ecological problems; some of which we see now and some of which have a cumulative nature and we will face the results only in the future”.

2. Male (Russian) – lives in town, works for the local Agriculture Committee.

“Of course, industrial development influences reindeer herding. Many pastures went bad. In the Varandey area, all lands are covered with roads and the map reminds you of a web. Several years ago, there were only rigs there, and the roads passed through pastures, but, anyway, it was possible to cross that place and pass around. Nowadays, as many new pipelines have been constructed they sometimes cross reindeer migration routes. Both parties are trying to regulate this problem now. Imagine, once a road was a traditional way for herding; all along the way there were people’s places of rest, watering and suddenly pipelines cut this. Reindeer herders had to look for new places and new roads because the lines broke his traditional cycle. How was it organized earlier? For example, the herd went to the sea on the left of the pasture and it went back by the right. It meant that the biota of the pasture had time for “rest” and “renewal”.

3. Male (Nenets) - reindeer herder from Varandey tundra

“I have 3 brothers and 4 sisters. All my brothers are reindeer herders, the same as me. We work together. I’ve herded reindeer on the Varandey tundra since the

1970s. The last 3 years have brought many changes. Now we've lost the best pastures where we used to spend 2 weeks during autumn. I'm very much worried about the future because if the summer road is constructed, then we would not be able to cross it with the herd. It's a pity that they do not ask us, or even have an official permit. They first build it and after that go for permit, sure, it's an easy way, first to do and when a construction already exists – then go and get papers!”

***4. Male (Nenets) - reindeer herder
from Varandey tundra***

“Our clan consists of 15 people. We live in three chums and we have about 2.5 thousand reindeer.

We can understand that oil-workers miss home and they want to have dogs, they work in shifts and could take care after their pets. But their dogs get out of control and cause us a lot of problems when we pass near a pumping station or any other inhabited industrial place.

There are other problems, too. These companies are private, if something happens, who will compensate our losses in the future?”

***5. Female (Nenets) – chum-
worker from Varandey tundra***

“They put markers for a future road, just on the way of our traditional migration. Do you know when we cross rivers with reindeer and sledges, the quality of the slopes for going down and up are very important. If they occupy this place, then it will be difficult to find other suitable places to cross our herds.

Along the way of our migration we have six abandoned oilrigs, the land around is destroyed. I've heard that they had begun restoration of the land in some places.”

***6. Female (Nenets) - chum-worker
from Varandey tundra***

“I live in tundra with my husband and 4 children. At present, my older son takes courses in the affiliate of the Archangelsk Technical University on the development and exploitation of oilrigs. His courses require payments. At first, it was the Varandeyneftegas Company that paid, now Naryanmarneftegaz pays. My son already had working experience on an oilrig. For us it is good, because he earned money. He works in shifts. When it's his turn to rest, he stays with his family and reindeer in the tundra.

-Do young people want to work in the tundra? Are there enough herders?

We have enough herders; there are no problems with it.

The route of our migration has changed over the past years, now we move mostly along the Peschanka River and it's 3 years since we used our autumn pastures at Medinsky Zavorot.

7. Male (Komi) – officer from reindeer herding kolhoz Izemsky Olenevod⁹⁴

We don't think it's very important if what scenario or our enterprise is chosen for the oil sea transportation. It's clear that once oil is extracted, it's transported. More important is the question of the serious and responsible attitude toward the nature and the people for whom this land is home. It's important to think about our needs. For instance, that normal passes are constructed in the right places. When I say "normal pass" I mean that it should be considered for a season, for example, in winter it is a blanket of snow, in autumn the reindeer has big branchy antlers. We should talk about all these details beforehand with herders.

Pictures 17 *Local participants from Varandey and Indiga areas*



⁹⁴ Interview of the 18th of June 2003 at the South Shapkino Oil Field

Appendix 2 Krasnoe village

The reindeer herders' families from Erv and Kharp live in the in the village of Krasnoe. It is also the place where administrations of the SPK "Harp" and "Erv" are situated. The village benefits from its close location to the regional centre (only 40 km of seasonal earth road from Naryan-Mar). It has an advanced social infrastructure (house of culture, kindergarten, school, boarding school, public bath, boiler, several shops, post-office, sewing workshop, fur-farm, cattle-farm, public museum, telephone station, outpatient ward). The houses have gas facilities sullied from the Vasilkovskoe gas field.

At 1 July 2003, 91 people in the village were unemployed (the total population of the village is 1,840).

Picture 18 *The viesw of Krasnoe village*



Appendix 3 Association of Nenets people “Yasavey”

Picture 19 *Yasavey homepage at the Internet* www.yasavey.ru



The non-governmental organisation association of Nenets people "Yasavey" of Nenets autonomous district was established in 1989 in Naryan-Mar. It unites Nenets and other indigenous people of the North Russia, who are living in the Nenets Autonomous District.

In translation from the Nenets language, "Yasavey" means -"a guide who knows the locality", this name expresses the aim and the tasks of the Association - to work on solving the social and economical problems of the Nenets people's life, to promote their national awareness, conservation of their culture and traditional life style.



Picture 20 *Yasavey leaders: President Peskov*

V. and Executive Director Belugin A.

The Association of Nenets people "Yasavey" unites the efforts of the Nenets people on the protection of their legal rights and interests, on solving problems of social, economical and cultural development, increasing their national awareness and living standards. A local organization of the Association "Yasavey" represents the Association in a rural locality. There are 12 and they cover all the Nenets people living in the autonomous district. The Congress is a higher controlling and representative body of the "Movement", which is gathered together not less than once a year. The Council, which is elected at the Congress, is the active controlling body in the period between meetings of the Congress. The Council consists of 11 members. It has a President, Vice-President and Executive Director. "Yasavey" is a member of [RAIPON](#).⁹⁵

⁹⁵More about RAIPON see: www.raipon.org

Appendix 4 An extract from “Rules for employees and visitors coming to South Shapkino (Yuznoshapkinskoe) Oil Field”

Welcome to South Shapkino Oil Field

Everybody coming to South Shapkino Oil Field has to meet Safety Rules and In-Field Regulations. The following requirements are to be observed by employees and visitors coming to and leaving South Shapkino Oil Field:

You are not allowed to bring in:

- Alcohol beverages
- All type of weapon, ammunition
- Explosives, poisons and flammable substances
- Pets (dogs, cats etc)

You are restricted in:

- Having alcohol beverages
- Hunting and fishing
- Buying meat, fish, furs and game, etc from local people and taking these from the South Shapkino oil field

Picture 21 Entrance to the Yuzno-Shapkonno oil field



A list of key informants

Apitsin Anatoly Alexandrovich	Reindeer herder, Indiga
Apitsin Stepan Leonidovich	Reindeer herder, Indiga
Ardeev Alexandr Ivanovich	Specialist, Nenets regional Administration
Belugin Alexandr Egorovich	Chief executive of the association of the Nenets people "Yasavey" of the Nenets AD
Bershatsky Oleg Nikolaevich	Specialist of the regional committee of the Nature Use and Protection
Borovikov Vladimir Vasilevich	The main land use planner of the Naryanmarneftegas Company
Chuprov Vasiliy Mikhailovich	Inspector of the State Marine inspection of the Ministry of Natural Resources of RF
Chuprova Valentina Vasilevna	Pensioner
Dvoynikov Aleksey Nikolaevich	Specialist of the administration, Indiga
Kanev Andery Darmidontovich	Reindeer herder from the sovkhos "Izemsky olenevod
Kanev Ivan Darmidontovich	Reindeer herder from the sovkhos "Izemsky olenevod
Khabarov Petr Alexandrovich	Director, reindeer farm Erv
Kuznetsova Mariya Mikhailovna	The Employment office, Krasnoe
Lachin Konstantin	Vice Director from the sovkhos "Izemsky olenevod
Ledkov Aleksandr Mikhailovich	Reindeer herder, reindeer farm Erv
Ledkova Valentina Fedotovna	Chum-worker, reindeer farm Erv
Mihailova Anastasiya Federovna	Nenets cultural centre, Naryan-Mar
Pashkin Sergey Yakovlevich	Deputy director of the Indiga sovhoz
Poroshkina Lyudmila Yurevna	Nenets Department of the Natural resources of the Ministry of Natural resources
Rocheva Lyubov Agafonovna	Farmer, Viucheiskoe
Taibarei Ekaterina Petrovna	Culture specialist in club, Krasnoe
Taibarey Mihkail Fedotovich	Reindeer herder, Indiga
Taleev Nazar Aleksandrovich	Reindeer herder, reindeer farm Erv
Taleeva Mariya Ivanovna	Master, handicraft workshop Varandey, Naryan-Mar
Terent'eva Anna Alexandrovna	Pensioner, Krasnoe village
Toropova Alena Vladimirovna	Teacher, Indiga village
Vilka Ignat Vasilevich	Reindeer herder, reindeer farm Erv
Vilka Tatyana Alexandrovna	Chum-worker, reindeer farm Erv
Vilka Viktoriya Petrovna	Master, handicraft workshop Enabts, Krasnoe
Vyucheisky Vyacheslav Grigor'evich	Reindeer herder, Indiga
Vyuchesky Alexandr Egorovich	Deputy director, reindeer farm Erv
Yastrebov Artem Sergeevich	Land surveying committee Naryanmarneftezas
Yastrebov Georgiy Georgievich	The chief of Land use Committee of the Nenets autonomous district
Zayarnov Andery Mikhailovich	The chief of the Department on public relation, Naryanmarneftegaz

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