Resource Extraction and Aboriginal Communities in Northern Canada

Cultural Considerations

National Aboriginal Health Organization (NAHO)
Organisation nationale de la santé autochtone (ONSA)
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Under Section 35 of the Canadian Constitution Act, 1982, the term Aboriginal Peoples refers to First Nations, Inuit and Métis people living in Canada. However, common use of the term is not always inclusive of all three distinct people and much of the available research only focuses on particular segments of the Aboriginal population. NAHO makes every effort to ensure the term is used appropriately.

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INTRODUCTION

The economic potential of mining, oil and gas projects can appear very attractive to First Nations, Inuit and Métis communities struggling with poverty and high unemployment. Yet, the prospects of a major project may divide a community over the potential economic benefits of new local industries on the one hand, and the potential harm to the environment and to traditional lifestyles on the other.

For many northern Inuit communities, the resource extraction industries may appear to be at odds with their cultural practices of sustainable and respectful use of the environment. Mining, for example, is not a sustainable industry; in the long term it is only a temporary use of the land. The environmental consequences of these industries can far outlast the lifespan of the resources being removed. There are numerous examples of closed and abandoned mines being environmental hazards for decades or even centuries. Mining and oil and gas industries may undermine traditional land use patterns and contaminate soil, water and traditional foods. Essentially, each stage of a mining project—exploration, construction, production, closing, and reclamation—holds significant opportunities as well as significant risks for nearby communities.

The issues are complex and multifaceted, involving social, political, economic, and cultural dimensions. Not all affected communities may agree on the best course of action. For example, the Sahtu Dene, Gwichin and Inuvialuit are all members of the Aboriginal Pipeline Group and have endorsed the Mackenzie Valley natural gas pipeline project[1]. However, the Deh Cho and Dene Tha' First Nations to the south of them have not agreed to the project. As well, tensions between different Aboriginal communities may increase as a result of their involvement in separate Impact and Benefit Agreement (IBA) negotiations. The confidential nature of negotiations and disagreements over which communities should—or should not—be included in an IBA may foster competition and distrust between communities and Nations.

The Location of Mines

There is a very close link between Aboriginal communities, known mineral deposits and the location of mines. Natural Resources Canada estimates that about 1200 Aboriginal communities are located within 200 kilometres of mineral and metals activities. The Assembly of First Nations estimates that over 36 per cent of First Nations communities are located within 50 kilometres of major mine projects in Canada.
(Hipwell et al, 2002, p. 4)

This document will briefly review some of the potential issues and concerns that may arise with respect to the cultural dimensions of resource extraction. Traditional knowledge and cultural continuity, access to land and natural resources, and diet and nutrition are the issues that will be considered.

1. The Aboriginal Pipeline Group (APG) is an Aboriginal business in the Northwest Territories that has secured a right to own one-third of the Mackenzie Valley natural gas pipeline. More information is available on their Web site: http://www.mvapg.com/page/page/1922394.htm.

Traditional Knowledge and Geographical Information Systems

The Naonayaotit Traditional Knowledge Project was developed by the Kitikmeot Inuit Association and BHP Billiton, the company developing the Ekati Diamond Mine in the Northwest Territories. The word "Naonayaotit" means "seeking knowledge."

The project started in 1996 with the aim of integrating traditional knowledge into the mine's environmental management plan. Over 50 Inuit Elders and senior land users from Kugluktuk, Cambridge Bay, Omingmuktuk, and Bathurst Inlet were interviewed. The seasonal movements of people and animals were traced on to topographical maps. The interviews recorded Inuit heritage and information about the behaviour of caribou and carnivores and information about fish, birds and marine mammals. It has all been translated and recorded into an electronic geographical information system (GIS) capable of managing the Elders' oral narratives. The traditional knowledge can now be electronically searched and printed onto maps.

A place names atlas has been prepared as well as 13 reports that detail heritage and culture, wildlife and land use, water quality, and Inuit opinions about exploration, research and development. The GIS database contains confidential information, so it remains the intellectual property of the Kitikmeot Inuit Association.
(BHP Billiton, 2006)

Traditional Knowledge

Access to traditional foods and the maintenance of traditional knowledge, spiritual traditions and language are fundamental to Aboriginal identity. These fundamentals can help reduce social problems such as poor nutrition, alcoholism, suicide, and violence.

The harvesting of wildlife not only provides food, it reinforces such cultural values as sharing, ethnic self-identity, the holistic systems of health, and the individual's sense of well-being and self-respect. It also contributes to the education of children.

The strength and vitality of many northern cultures are linked to heritage resources like caribou. But animal population levels are declining. The boreal woodland caribou, for example, is now listed as a species at risk. There is concern about habitat destruction from oil and gas exploration, and from Arctic uranium, gold and diamond mines. Caribou populations are also threatened by over-hunting as a result of more roads and better equipment like snowmobiles, as well as increased predation from wolves, coyotes and bears. Some biologists predict that caribou herds will be under greater threat if the natural gas pipeline along the Mackenzie River is completed[2]. Traditional knowledge can be used to reduce the impact of pipelines and mining on caribou migrations. For example, traditional corrals may be a way to herd caribou away from mining sites during their migration.

In some ways, resource projects have the potential to strengthen the value of traditional knowledge. For example, development projects require environmental reviews that incorporate traditional

2. See http://www.canadiangeographic.ca/atlas/themes.aspx?id=RIVERS&sub=RIVERS_WEST_MACKENZIE&lang=En

knowledge. This necessitates the recording of traditional land use and occupancy, and can contribute to resource management planning not only during the life of the industrial project but long after it is finished. The use of Geographical Information Systems (GIS) is becoming widespread for this type of documentation. GIS is used to map traditional ecological knowledge (TEK) and other culturally important information. Traditional place names, sacred sites, traditional travelling routes, traditional food gathering areas, archaeological sites, and heritage areas can all be digitally recorded. The knowledge and wisdom of the Elders can be used to inform the planning and management of natural resources within the traditional lands. It can also be used to teach younger generations.

Participation in the environmental review process also provides the opportunity to ensure sacred sites such as burial grounds, sites of worship and other spiritually significant areas are recognized and respected. This prevents resource companies from inadvertently violating sacred sites and the ensuing hostility and emotional and spiritual stress caused to community members.

Traditional and Modern Economies

At the community level there is tension between traditional and wage economies. Many northern communities still rely on wildlife harvesting to provide food and to reinforce cultural values such as sharing. On the other hand, some participation in the wage economy is essential to buy the

The Northern Dual Economy

Participating in the dual economy refers to involvement in such traditional harvesting activities as hunting, fishing and gathering as well as participation in the cash economy. The traditional and monetary economies are now interdependent—traditional harvesting commonly makes use of expensive equipment, which can only be purchased with wage earnings. At first, trapping and the fur trade were important sources for money. Snowmobiles have now replaced dog teams but they require money to buy and expensive gasoline to operate. Wage employment provides money to purchase and operate equipment needed for traditional harvesting. With the decline of fur prices and the boom and bust cycle of resource exploration, the dual economy has become unstable and is now largely sustained by government employment, temporary wage employment, and social assistance payments.
(Mackenzie Gas Project: Joint Review Panel Round 2, 2005, pp.38–41)

equipment needed to hunt and to purchase other essential market goods. But wage earners are less likely to share their income with the family or community, and may not spend their earnings in the community in support of local businesses. This can undermine community health and wellness.

The potential for an improved standard of living may make employment opportunities in the resource extraction industries look very attractive to Aboriginal workers. However, the prolonged fly-in and fly-out cycle of work can put pressure on family relations and reduce opportunities for workers to provide traditional foods. On the other hand, wages may be spent on new equipment and supplies that increase the efficiency of the harvest. In this context, resource extraction projects can be seen to strengthen traditional harvesting activities. Unfortunately, with an influx of cash and a higher demand for equipment, the cost of the equipment is likely to rise— at least during the lifetime of the

project. This may make it difficult for those who are not earning high wages to purchase or upgrade harvesting equipment.

One option to balance the tension between the two economies is to have resource companies supplement the cost of seasonal community hunts. For example, the mining company BHP Billiton helped with the Lutsel K'e community caribou harvest by chartering a plane, but this was a one-time event. Another option is to have local harvesters provide country food to the work camps. Ideally, there would also be flexible work schedules that accommodate traditional harvesting and other Aboriginal cultural, family and community needs.

Access to Traditional Resources

The resource extraction industry can undermine traditional land use patterns and alter the health, quality and availability of resources. There are concerns, for example, that the proposed 1,220 kilometre pipeline for the Mackenzie Gas Project will fragment crucial wildlife habitats and migration corridors, and, in turn, affect the way of life of many Aboriginal residents. Destroyed wetlands, clear-cut forests, explosions, seismic activities, and heavy vehicles can disrupt wildlife behaviour, forcing people to travel farther to hunt. These projects also open up largely undeveloped regions to increased resource exploitation. The result may be more development and more roads, airstrips and hydro dams.

The Problem with Mining Roads

New roads improve access to wildlife resources but they can also promote over-hunting and the loss of wildlife. Poachers and big game outfitters who take groups out hunting are using the roads. The hooves and legs of caribou are getting injured crossing the rocky embankments of the mine access roads, and wolves are using this to their advantage. Decommissioned roads are also being used as travel corridors. Wildlife is being killed in collisions with construction and mining vehicles. Road construction may also alter the flow of streams and rivers and result in the destruction of fish habitats.

Without proper long-term planning and management, the legacy issues of resource extraction may undermine access to traditional resources. At issue is what is left behind after the project is over—abandoned pits and mine shafts, ore and waste rock deposits, roads, heavy equipment, storage facilities, oil spills, and garbage can have long-term negative effects on the environment. This debris is disrespectful of the land and its Aboriginal users.

Nowadays, all governments in Canada have legislation, rules and regulations that guide the closing of mines and oil, gas and pipeline projects. Generally, governments require companies to have closure and reclamation plans before a project begins. The intent is to return the land to its pre-mining or pre-project state. In case a company goes bankrupt, governments may require financial deposits to make sure there is enough money to clean up a site once operations stop.

It may take decades to properly close a project like a mine. Buildings and other structures must be removed, as well as roads, airstrips, waste rock and waste water facilities, pipelines and transmission lines, chemical and fuel storage facilities, and other facilities and equipment. In addition, water

quality must be monitored, the topsoil restored and the site landscaped, and the area replanted with plants and trees. It may take many more years of monitoring to determine the success of these reclamation efforts.

Traditional knowledge can play an important role in defining what needs to be done to return a development site back to its natural state. Information collected during the initial environmental review process can help guide reclamation plans and set the criteria for successful recovery. Ultimately, resource extraction projects are temporary activities. Any disruption to access to traditional resources should therefore also be temporary.

Diet and Nutrition

As a rule, promoting traditional foods encourages the use of traditional knowledge while improving the health of local Aboriginal people. With the coming of industrial development, some communities say they can no longer hunt, fish, trap, or enjoy being on the land as they once did. Dene Tha' hunters and trappers report that moose are becoming harder to find and Caribou populations are declining. The dietary health of northern communities is influenced by the level of access to traditional or country food, their dependency on southern foods, and the question of contaminants.

Elders state that the health of young people would improve if they ate more traditional foods and less market foods. Research has shown that the diet of Dene and Métis community members was better when they ate a combination of traditional and market foods instead of a diet comprised solely of market foods. In northern communities, southern-made market foods are limited in variety and quality, and are much more expensive due to shipping costs. Besides the lower costs and higher nutritional value of a traditional diet, country foods are a source of cultural strength, contributing to the social, mental and spiritual well-being of individuals and the entire community.

Northern contaminants are a complex issue that extends beyond the impact of oil, gas and mining activities. A great deal of research has been conducted into this matter—much of it financed and coordinated through the Northern Contaminants Program at Indian and Northern Affairs Canada. The general consensus is that southern contaminants transported to the Arctic through atmospheric and ocean cycles, and which accumulate in northern country foods, should not discourage the consumption of this food. Country food is healthier than a diet comprised of southern processed foods high in salt and sugar.

Mining activities and major construction projects are also contributing to contamination. Radioactive material, heavy metals, acids, and dirt and dust from roads and construction sites are major problems. Heavy metals like cadmium, mercury and lead, and persistent organic pollutants concentrate in the fatty tissues of Arctic animals, causing problems in their reproductive and immune systems. As they are at the top of the food chain—along with polar bears—humans are exposed to high levels of these pollutants through country food. Industrial activities also undermine access to country foods; roads, mines and pipelines are disrupting terrestrial and aquatic habitats. The quality and availability of country foods are declining.

Wages from industrial development will likely encourage the consumption of southern market foods. Without flexibility in work schedules to allow for seasonal harvesting activities, both workers and their family members will eat less country food. Obesity, diabetes, increased heart disease, and other chronic diseases typically follow this shift in dietary habits. The rise in these conditions is clearly documented in the results from the Survey on Living Conditions in the Arctic (SLiCA).

One option is to have development projects provide country food to Aboriginal workers. The Voisey's Bay Nickel Company in Labrador is a case in point. Alternatively, companies could facilitate annual harvests with time off and direct financial support, such as the above-mentioned charter aircraft that mining company BHP Billiton once provided to Lutsel K'e workers at the Ekati diamond mine for their caribou harvest.

Cultural Continuity

Resource development projects offer major opportunities and pose two major challenges to northern communities. On the plus side, they offer employment and training opportunities, business opportunities, and the chance to improve the standard of living of community members. The two major challenges they pose relate to the social impact that mining, oil, gas, and pipeline projects bring to small and remote communities, and the environmental impact of these projects. The consequences can have a profound effect on a community's cultural integrity and on the value of traditional knowledge.

Though the timeframes may vary considerably between a pipeline project and a mining project, they are all short-lived. The Mackenzie Gas Project is expected to take only three years to build. This is a classic boom and bust cycle of resource exploitation. For many communities, the social changes or disruptions are expected to be short-term. The environmental consequences also may be considered short-term. As mentioned above, current regulations and legislation require that the land be returned to its original state after a project is complete. The effects on cultural continuity are more difficult to gauge. Opportunities for wage labour and money from mining royalties may contribute to the loss of traditional cultural values and undermine the social ties that bind small communities together. Projects may encourage workers from the south in search of high-paying jobs to come into the region. Their presence may disrupt a close-knit community.

The ultimate question is, how can cultural traditions be maintained or integrated into resource development plans? Integrating traditional knowledge into the environmental review process to reduce the environmental impact of a project and to guide current and future resource management is important. But the project may still disrupt access to traditional foods that are important to cultural identity. This in turn may impact the diet and nutrition of community members. The influx of cash into the community may encourage the consumption of more southern foods, or it may provide money to buy equipment to continue harvesting traditional food—even if it is necessary to travel farther to find the wildlife.

The unanswered question is whether resource development projects create temporary inconveniences in the life of a traditional Aboriginal community, or disruptions that outlast the short-term social problems and environmental consequences?

Questions to Consider:

1. Are the environmental consequences of a project too severe to allow traditional cultural practices to continue, even if there are regulations and laws requiring that the lands be returned to their original state? Will natural resources be altered to a point of no return?

2. Are modern systems to record traditional knowledge adequate? Are Geographical Information Systems (GIS) used during environmental review processes adequate?

3. What existing systems are in place to protect the traditional knowledge of your community and region? What does your community need to better protect cultural activities and traditional knowledge in your community/region?

Further Reading:

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