Resources and Sustainable Development in the Arctic (ReSDA)

A Summary of Projects
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Editors: Shermaine Chua, Stephanie Pike, Chris Southcott,

Corresponding editor: Chris Southcott

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ReSDA Project Summaries

Introduction: The ReSDA Research Network and its Research Projects

In places such as Arctic Canada, given modern land claim agreements, new forms of self-government, and a general trend towards decolonization, there is an increased desire to find out if it is possible for the region to use extractive industry to assist with their own long-term futures. While some, perhaps with reason given what has happened in the past, would say that there is no possibility of mining and other extractive industry activity benefiting northern communities, the research summarized in this report started with the premises that it is up to the communities themselves to decide this, and that in order to make this decision, they require the best available information. As a partnership of northern communities and researchers, the ReSDA research network has therefore asked the question: How can you maximize benefits of resource development to northern regions and communities and minimize the social, economic, cultural, and environmental costs? Answering this question is the objective of the projects summarized in this report.

The partners and researchers involved in this network have been working together on social and economic projects for many years. Starting in 2009, communities began to highlight concerns over increased interest coming from the extractive resource sector. With new comprehensive land claim agreements and other new mechanisms of control, communities now believed they had the power to say yes or no to these projects but they lacked adequate information about possible impacts and benefits. This led to the development of the Resources and Sustainable Development in the Arctic (ReSDA) proposal which received funding from the Social Sciences and Humanities Research Council of Canada (SSHRC) in 2011. It involved over 60 researchers at many institutions in all Arctic nations working with partners in Canada and elsewhere. In the first years of ReSDA we completed 14 gap analysis projects. These reports and their plain language summaries are available on the network website (www.resda.ca). Based on the findings of these gap analysis reports we organized a large number of additional projects. It is these projects that are summarized in this report. More in depth information for each project can be found on the ReSDA website. Much of this research is also seen visually in the ReSDA Atlas of Arctic Resource Development accessed through the ReSDA website. The summaries in this report include all those projects which had completed work in 2019. A few projects are in the final stages of work and these will be added to ReSDA website at a later date. As indicated in their summaries, some projects included in this report hope to add information to their findings. These additional findings will also be added to the website when available.

The ReSDA research project included a wide range of issues – each decided after discussions between partners and researchers. All however, attempted to come up with information that will assist communities to better understand the impacts and potential benefits of resource development on their long-term sustainability. The research outlined here shows that answers regarding whether or not communities should agree to extractive resource projects are complex. We hope that this research provides northern communities with more in-depth information on which to base their decisions.

Chris Southcott
Lakehead University and Yukon College
Principal Investigator,
Resources and Sustainable Development in the Arctic
Measuring Wellbeing to Understand Resource Impacts

Research suggests communities that establish an agreed-upon model of measuring community wellbeing benefit from greater local ownership in decision-making along with a larger capture of material wealth and empowerment over resource management. Despite the increased interest in studying community wellbeing, there has been no evaluation of models of measuring community wellbeing across Yukon and Alaska.

**What is this project about?**
Growing evidence suggests that the wellbeing of a community is strongly linked to determinants of health, community capacity, increased economic activities, and higher educational outcomes. Although many communities have started to find ways to evaluate wellbeing, there is a lack of research on the various models in the Arctic. The main objective of this project is to examine models of measuring community wellbeing in Alaska and Yukon to determine the level of input from residents and whether these models reflect local living conditions.

**How was research done?**
Kent conducted an in-depth search for publicly-available models in Alaska and Yukon, eventually finding three for each. This study consisted of a literature review, research on the historical and background information of each model, a pilot content analysis of keywords, and semi-structured interviews with experts familiar with the models. The analysis included a search through each model’s records to document community outreach methods, an experimental content analysis to identify themes across models, and a content analysis of the interviews.

**What were the research results?**
Community wellbeing varies with local conditions and interests. Existing models of community wellbeing fail to reflect the diversity of Northern living conditions. Despite political, historical, and social differences, there was little difference in the incorporation of local input between the Alaska and Yukon models were found.

Both initial analyses and interviews found that the existing models did not adequately incorporate local input. There was a clear lack of local input with the construction of models of measuring community wellbeing. This is problematic and can create frustration among residents, who may feel like their voices are not heard or that their opinions do not matter. This may decrease the indicators’ effectiveness and potential benefits to communities’ social cohesion.

Finally, a problem lies in these findings not being properly translated into what researchers hold to be the right course of action. Spiers argues that this can be best addressed by increased community action, which he calls “results in action”.

**How can this benefit communities?**
The positive effects of engaging community members and including local participation in the development of indicators have been reiterated by numerous studies. As governments and organizations face continuing pressure to measure their performance and the impact of laws or programs, many turn to community wellbeing indicators to do this. It is important that community members are included in their design, and having a framework that mandates this may help communities mitigate social issues and encourage sustainability.

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This research was supported by the Social Sciences and Humanities Research Council of Canada.
Gender and Decision-making in Natural Resource Management

Natural resource co-management boards have been proposed as a collaborative, equitable, and effective approach to engage communities and governments in environmental decision-making and resource management. In Northern Canada, women are under-represented on co-management boards. Although women may participate in natural resource governance in other ways (e.g., informally), many of the women on these boards face gender-specific barriers to their participation. Gender also influences the decision-making processes of co-management boards.

What is this project about?
Although a considerable amount of research has examined the various social and political dimensions that influence the effectiveness of resource co-management, little has been done to understand how gender might affect collaboration and decision-making within this resource regime. The gender gap in natural resource management is quite noticeable: women make up only 20% of board members in the Yukon and 16% in northern Canada overall. This study set out to examine the ways in which a gender imbalance influences board decision-making and the experiences of those involved in co-management boards that have been established in the Yukon Territory.

How was research done?
This was conducted through a written survey and semi-structured interviews. The interviews tried to capture a range of experiences and involved 35 past and present board and staff members. Of these, 70% were women.

What were the research results?
The representation of women within these institutions was important to establishing a holistic decision-making process, as well as a positive institutional culture to facilitate it. Women’s presence on these boards influenced the scope and efficacy of decision outcomes. Interviewees were diverse, as were their experiences; there is no ‘one’ experience. Though opportunities to participate in decision-making existed, participants found there were still barriers preventing board members from acting on these opportunities. These barriers were experienced differently by men and women. Gendered roles and characteristics that shape the activities and expectations of those involved with co-management institutions. For example, several women used the language of having to ‘prove themselves’ to be heard on their board. Similarly, many women also felt the type of land-based knowledge they brought to the table was engaged with less, despite its relevance to their board’s mandate. Gender is only one form of diversity, and for some, not the most important part. Other aspects mentioned included education level, background, and age. A lack of youth involvement in co-management was one of the most common concerns.

How can this benefit communities?
There are clear benefits to having a greater diversity of voices—especially women’s voices—in decision-making. However, formal participation on co-management boards is not the only pathway to ensuring multiple perspectives are captured within co-management boards. One area that should be explored is how women influence decision-making informally. To support greater diversity and encourage formal participation in resource management, institutions must be restructured to be inclusive and value different types of knowledge and experience. Some of Staples’s recommendations for co-management boards include: provide training to their chair members to be responsive to board members’ logistical barriers, be more responsive to logistical barriers, consider the types of knowledge that is being engaged, and create position for youth on boards.
ReSDA Project Summaries

Resource Royalties Distribution and Community Development

Thierry Rodon
Université Laval
Isabel Lemus-Lauzon
Ève Marsan
Juliette Bastide
Rémy Darith-Chhem
Laurence Lefebvre
Université Laval
with community partners
- Société Makivik/
  Makivik Corporation
- NANA Corporation
- Kingfisher Lake First Nation

Theses and Reports

Publications

Revenues and royalties from resource development have a significant impact on Arctic and Subarctic communities. Communities can maximize their benefits from resource revenues and sustainability through proper management. They are faced with a number of different options for doing this, which all have varying tradeoffs and levels of sustainability. A community’s ability to use a certain method of resource distribution and potential to benefit from it varies between communities and their individual context.

What is this project about?
This project’s objective is to analyze the different methods used by Indigenous communities and organizations to distribute royalties and profit shares paid by resource companies. It documented the benefits and negative impacts of distribution strategies and assessed their sustainability or ability to mitigate a resource dependency, along with its social and economic benefits.

The project is being conducted closely with indigenous organizations and local stakeholders such as Makivik Corporation, and Indian and Northern Affairs Canada. Knowledge transfer is a key aspect of the study.

How was research done?
This project consisted of a literature review, followed by a survey administered to communities as well as three case studies on Raglan Mine (Quebec), Red Dog Mine (Alaska), and Musselwhite Mine (Ontario).

The literature review allowed the distinction of three main modes of distribution: Direct payments (short term investments), investments in community development (community infrastructure and programs of various lengths), and putting the revenue in a trust fund (long term investments).

The research team conducted phone surveys with Indigenous communities that signed an IBA. The survey met challenges in engaging community participants. Of its 18 respondents, only some partially filled out the survey. The responses were useful, but the low response rate shows the importance of addressing communication issues when working with Indigenous communities.

The three case studies presented different institutions, governance, and revenue distribution strategies. In all cases, local stakeholders encountered difficulties in balancing urgent needs and pursuing long-lasting benefits.

What were the research results?
Direct payments allow for individual choices, promotes income security and intragenerational equity, and are preferable for communities that have low trust in their leadership. However, they do not lead to long-term growth, disincentivize work, and do not promote interregional equity.

A programs- and services-focused approach allows local government to choose what to do with the money and target key areas that require attention such as education, healthcare, youth support, or suicide prevention. A key obstacle to ensuring long-term development is that these offerings close down or change when funding runs out and these programs are closed down.

Similarly, infrastructure is a good investment that addresses collective needs,
but are often accompanied by high maintenance costs. The sustainability of projects depends on the infrastructure at hand.

Trust funds are an agreed-upon method of preserving and building upon capital that allows for intergenerational equity. Their downside is that they are not as useful at a community level, as communities may not be motivated by the amount of money generated if it is low, especially if there is a high level of poverty.

In the phone surveys and the case studies, all respondents said that mining revenues had been beneficial for the communities. Social programs for youth and some health programs were most beneficial for communities.

Half of the surveyed communities had some sort of consultative process with the local population regarding the mode of distribution. Survey participants were divided on the best way to use the revenues: about half of them said that investments in trust funds or long-term projects (e.g. education, housing or infrastructures) was the best way to maximize benefits while others considered individual payments more efficient. Direct payments were not found in most communities, and community development projects were the most common use of resource revenues.

A lack of transparency in the distribution process was stressed as an important issue, sometimes causing distrust and a sense of inequality. The difficulty of retaining and investing funds in communities related to a lack of local capacity for investments was another main concern that was mentioned.

Raglan Mine’s communities of Salluit and Kangiqsujuaq have different means of managing their revenues. Salluit has opted for individual revenue distribution. Kangiqsujuaq has mostly invested revenues in community infrastructure and projects. Data shows that even if Kangiqsujuaq receives less revenues from the mine, its community well-being indicators are higher than in Salluit.

Musselwhite Mine’s Kingfisher Lake First Nation makes no direct payments, and a large proportion of the revenues from the Musselwhite mine was in community projects. The community enjoyed some business development along with the support of local employment through this program.

Red Dog Mine’s revenues are managed by native-owned NANA Corporation. NANA’s mixed strategy includes individual payments, collective investments, and trusts. Half of its revenue is distributed among its 14,000 shareholders. There is a slight problem in the fact that almost half of them live outside of the region, as this means that revenues exit the region quickly.

NANA has also created community grants and projects and has developed a strong business division. Overall, its economic diversification and strong, reasonable institutions created diversified modes of distributing resource revenues. It enjoys a high amount of community involvement, and this causes mining activities to have a larger impact on the community and incentivizes firms to maintain good relations with NANA. As such, greater community appropriation increases communities’ capacity to benefit from resource development. Despite NANA’s successes in revenue uses, sustainability remains hard to ensure. Finding ideas and plans for when the post-mine closure period is a priority for communities.

Collective investments create more sustainability, but there are significant obstacles to pursuing them, such as a lack of trust and transparency. Poverty adds another dimension to this, as it becomes harder to balance immediate social issues with long-term growth. Community involvement is also important for managing resource revenues, as evidenced by NANA Corporation’s successes.

While there is no inherently bad strategy, strategies that have a strong vision and plan for both the mine operation and post-closure periods can better ensure community wellbeing. Communities must do more to plan for the latter, as mines are not sustainable.

**How can this benefit communities?**

The findings from this project help to illustrate understand the effects, costs, and benefits of various resource revenue distribution methods. It also highlights the importance of strong local and regional institutions. This information may be of use to communities for assessing which methods are suitable for their own needs and managing resource revenues.

Decision-makers can use information on resource revenue impacts to design policies and programs to develop these strategies in a way that maximizes resource revenues’ benefits to local communities.

This research was supported by the Social Sciences and Humanities Research Council of Canada.
Measuring the Land Based Economy of Inuit Communities in Nunavik

Research shows how access to wildlife resources can reduce food insecurity and health-related illness among Indigenous peoples. Food insecurity is experienced unevenly among individuals, households, and communities. Despite the importance of wildlife harvesting activities, many residents in Nunavik do not participate in subsistence activities due to various constraints to their participation. To understanding resource development impacts we need to better understand participation in subsistence activities.

What is this project about?
Food insecurity remains a pressing issue in the North. Wildlife resources contribute significantly to reducing food insecurity among Indigenous communities. The 2001 Aboriginal Peoples Survey found that country foods (e.g. caribou, whale, seal, fish, and berries) made up over half the diet of 78% of Nunavik’s Inuit households. In addition to sustenance, food sharing among Inuit is also critical to strengthening the cultural and socio-economic ties with others and demonstrating respect for the animals that offer themselves to hunters.

This research measures the contribution of the land-based economy to the Nunavik livelihoods. The land-based economy involves the harvest and sharing of country foods between households, communities, and hunter support program networks. Focusing specifically on Qaqtaq, Inukjuak, and Kangiqsualujjuaq, it examines the barriers faced by Inuit households in harvesting wildlife resources to their desired extent.

This project was done as a part of Makivik Corporation’s studies as well as a component of Shirley’s Masters Thesis, which analyzed and compared subsistence activities among First Nations, Inuit, and Alaska Native communities.

How was research done?
This study measured the total contribution that wildlife harvesting provided to the three Nunavik communities over a 1-year period. The 2012-2013 findings were compared to that of a study conducted in 1975-1980, following the signing of the James Bay and Northern Quebec Agreement. Shirley also drew from literature on the subject, and conducted a literature review as a part of her broader thesis work.

What were the research results?
Barriers to harvesting are experienced at different levels by different communities, age, and political setting in which harvesting occurs. Cost and employment were both found to decrease the likelihood of harvesting. In Nunavik overall, cost was the most commonly cited barrier to harvesting (44% of respondents). In the community of Kangiqsualujjuaq (pop. 874) alone, harvesting wildlife resources cost approximately $474,672. Other barriers mentioned were time limitations associated with employment (23%), lack of knowledge and interest (13%), poor health (12%), and school attendance (6%). Experiences with barriers differed among different communities. The James Bay and Northern Quebec Agreement established hunter support programs to offset the high costs of harvesting. When compared with other Indigenous communities, this political context and legislative conditions were shown to have an impact on communities’ and the region’s experiences with barriers to wildlife harvesting. Gender was not identified in the Nunavik survey, however gender was found to have an impact on participation in wildlife harvesting in studies of other Indigenous communities.

How can this benefit communities?
Along with contributing to a more informed understanding of Northern Indigenous food security, this project’s findings can be used to create policies that support subsistence harvesters and address food insecurity in the North.
ReSDA Project Summaries

Resource Development and Subsistence Harvesting: Impact Mitigation and Best Practices

Rather than being a threat to the vitality of northern communities and environments, the development of non-renewable natural resources can be done in a way that ensures their long-term sustainability. Communities need to find a balance between industrial wage-earning opportunities do not displace subsistence economies, and the industry must work to mitigate their negative impact on the local area.

Harvey Lemelin
Lakehead University

Rebecca Rooke
Lakehead University

What is this project about?
This study examines the balance between collaborative management strategies featuring resource development projects and harvesting practices. It documents the ways in which industry is attempting to mitigate the negative impacts of resource development on wildlife harvesting, and aims to offer concrete solutions based on ‘best practices’ that can be used to enhance the opportunities for sustainable mixed-economies in northern regions. This will hopefully stimulate the development of new knowledge transfer techniques that will allow research results to be more readily utilized by actors in the region.

How was research done?
This project drew from case studies across Canada and Alaska to identify various strategies and practices used by major resource developers to mitigate their impact on the wildlife harvesting activities of Indigenous communities. Research was done through a literature review, inventory of existing practices, semi-structured interviews of industry employees and representatives, and an analysis of data.

What were the research results?
Industry participants believe that resource development has evolved substantially, and companies understand importance of environmental assessments, community consultation, and community support. Further, effective mitigation entails interactions and cooperation between different stakeholders, including government, communities, and industry beyond a mine’s lifetime.

In addition to mandated environmental assessments, community consultation, and inclusion of traditional knowledge in mine operation and closure plans, companies have specific programs in place to protect wildlife. Wildlife management and monitoring plans and protocols and daily-use and incidental-type mitigation strategies (e.g. employee training, careful waste disposal) have been developed. Firms also construct or modify infrastructure (e.g. roadways, bridges, and wildlife corridors) if they affect wildlife range, distribution, migratory routes, or breeding habitats. Industry supports employees' wildlife harvesting through providing direct financial or capital means, scheduling, and other indirect forms of support. Companies also have social and cultural wellbeing initiatives. One company holds an annual event in which locals are brought to the site to involve them in environmental monitoring.

Difficulties lie in inconsistent enforcement of environmental legislation, which many attributed to low government capacity to do so. Participants also noted difficulties with impact-benefit agreements (IBA) and barriers preventing the adequate retention of IBA negotiations, especially a lack of capacity on both sides of a negotiations and the absence of a party responsible for monitoring and enforcing agreements.

How can this benefit communities?
Environmental assessments continue to be a learning process for review boards, but there has been relatively little sharing of lessons from different cases. This research, which shares information and best practices from previous mine operations may help assessment boards, industry, and communities in their efforts to mitigate resource impacts.
Environmental Legacies, Resource Development, and Remediation in the Arctic

The industrial-scale development of non-renewable resources in the North began in the early twentieth century. Until relatively recently, extractive activities like mining proceeded without any substantive clean-up or mitigation activities; many of these sites were abandoned or only partially reclaimed. They now present toxic and other environmental remediation challenges. Although environmental assessments are much more common, these do not always fully reflect the financial costs and remediation challenges associated with environmental legacies. For communities, post-development remediation remains one of the most neglected stages of non-renewable development in the North.

What is this project about?
This research examined a broad range of historical and recent remediation projects in the circumpolar north. Its goal was to assess the various roles of state regulators, industry, and communities in a broad range of remediation projects, assessing the costs and benefits of these post-development activities for northern communities. Using historical case studies, it sought to understand community and Indigenous engagement, project governance and oversight, mitigation of environmental issues, the role of science and expert knowledge, issues of historical memory, and financial security and public liabilities associated with remediation projects.

How was research done?
Research for this project focused on publicly-available documents that pertain to individual remediation and monitoring programs for environmental legacy issues in northern Canada. Sources include federal contaminants and monitoring programs in the North, public registries of regional water boards in the North, territorial archives, and publicly-available reports on provincial remediation programs.

What were the research results?
There is no overarching vision informing reclamation planning. Abandoned mines are purportedly the territories’ responsibility, but the reality is far more complex given existing legal regimes. Definitions of remediation and reclamation have changed, and remediation efforts now draw on traditional knowledge and encourage local involvement (although not necessarily consent). Despite these advancements, government remediation programs and policies are rarely prioritized unless they meet specific policy goals (i.e. paying down the deficit or providing jobs and training).

Fundamental issues remain with common portrayals of reclamation. The oft-repeated rhetoric describing an older era of irresponsible, polluting, and unreclaimed mining versus a new era of responsibility and stewardship persists despite the fact that this does not always reflect northern experiences. Large-scale reclamation is still frequently portrayed as a challenging technological feat, to be resolved by studies, checklists, and classification system. This can divorce clean-up from the extractive activities that create the need for remediation in the first place. Federal programs struggle to handle the temporal dimensions of
The North needs stable, long-term funding to address mine remediation as a component of wider cumulative impacts of development. In particular, much more must be done to help communities address the temporal dimensions of reclamation (e.g. maintenance and monitoring “in perpetuity”). Even smaller-scale reclamation works demand long-term thinking far beyond the next electoral cycle or budget.

Finally, remediation is often defined differently depending on the audience and the speaker. Too often, “successful” remediation does not align with northern communities’ expectations. Further, while official information and standards are made public and available, the systems surrounding remediation are not always accessible or transparent for anyone but a trained scientist. More must be understood in order to grasp how communities define and understand remediation, and ensure that these ideas are incorporated into reclamation policy at every level.

How can this benefit communities?
Managing abandoned mines and other contaminated sites is a massive challenge for northern governments and communities. Reclamation is underpinned by environmental justice concerns and the ongoing impacts of settler colonialism.

It can be difficult for community members to navigate existing procedures and policies on mine reclamation. This research may help communities understand the impact of community involvement in mining reclamation, the development of current reclamation policy, what policies currently exist, and how legislation applies to local resource development projects.

Recognizing that mining remediation legislation can be inaccessible and difficult to understand, Dr. Anne Dance created a hyperlinked poster on the various mining laws, policies, and programs for mines to serve as a reference. She will be updating this poster every two years to illustrate the changing reclamation framework in the North. The research team also contributed to a Write to Know letter to Canadian policymakers on the subject on abandoned mines in the North; since then, the government launched its National Orphaned and Abandoned Mining Initiative (NOAMI), a resource for Canadians showing information on some—but not all—abandoned sites in the North and the rest of Canada.

This project may help policymakers understand what changes to legislation or additional legislation are needed to make resource development in the north more environmentally sustainable and beneficial for northern communities. Of the gaps identified, the most important issue with current policy is that it fails to address the temporal dimensions of reclamation; mines’ impacts can continue into perpetuity.
Labour Mobility and Community Participation in the Extractive Industries:

Extractive industry operations have always been connected to labour mobility. Long distance commute work (fly-in/fly-out or FIFO) and rotational shift work has emerged as a key model of labour force provision for mining activities in remote regions. This is the case in sparsely-populated areas of northern Canada, where mines are often far away from communities and locals commute and stay on a rotational basis in camps. There are benefits and disadvantages to this type of arrangement, but the impacts are not clearly understood.

What is this project about?
Fly-in/fly-out (FIFO) is a term that describes rotational shift work where workers live in a camp and work for a set period of time (typically two weeks), and then are off for another period of time. There can be benefits and disadvantages to FIFO arrangements, but their impacts are not clearly understood. Researchers aimed to collaborate with communities and involve them in research and the creation of materials that can be used to support their needs.

How was research done?
Researchers conducted around 100 thirty-minute- to one-hour-long interviews with mine workers, family members, community representatives, government representatives, managers from departments of local self-government, the Yukon Environmental and Social Assessment Board, the Yukon Health and Safety Board, representatives from mining companies and other experts. The team was based in Mayo, but interviews were conducted in mine sites throughout the Yukon.

What were the research results?
Many individuals who are interested in working at the mine or new mine workers do not have much prior knowledge about what life in the mine is like because the camps, being confined and remote places, are hard to visit.

It can be difficult for workers to adjust and cope with FIFO arrangements, as they live in small, confined communal camps and kept in close contact with fellow workers. This can create social issues within the camp, which add to the pressure of social issues that arise at home in the communities.

There is a strong awareness among the workforce and community members of the benefits and negative impacts of mining. Interviewees had concerns about the sustainability of mining practices—especially in regard to the environment and intergenerational equity. Employment and career sustainability was also another concern. The mobility from FIFO operations was found to be useful for this, as those who were trained only in mining-related professions could find employment during bust periods in other provinces. Diversification of skills was also important, and workers thought they should have multiple trades (e.g. working as an underground miner and electrician at the same time).
How can this benefit communities?
The findings from this project are being used to create a handbook for mobile mine workers and those interested in becoming part of the mining workforce. The handbook contains a compilation of stories and experiences from current and former mine workers in the Yukon who are employed in a variety of professions. It covers important issues such as:

- work conditions and attitudes in the camps,
- being away from and staying in touch with family and friends,
- dealing with private relationships and their complications,
- employment opportunities for First Nation members in mining
- being a woman in a male camp environment,
- money management, and
- doing shift work and being on the land.

The project’s findings may also be used to improve training for mine workers, especially for underrepresented target groups in the mine workforce such as women and First Nations people. It may also contribute to the development of training programs to better equip mining liaisons and young and future decisionmakers.

Publications


Presentations


PowerPoint at SCOPe Lunch and Learn, Whitehorse, YT, October 29, 2015.


News Features & Community Engagements


Mobile Miners: Long Distance Commuting among Mine Workers

Since the 1980s, mining companies have become increasingly reliant on long-distance commuting to move workers to mine sites. There are both positive and negative economic and environmental tradeoffs from such arrangements. Overall these offer new opportunities and potential for longer-term employment Yukon workers. Little has been written about workers’ attitudes towards this type of employment and mobile lifestyle.

**What is this project about?**

This research looks at the impact that rural mines in the Yukon have on their workers through long distance commuting operations (fly-in or drive-in). Its goal is to establish a better understanding of how Fly-in Fly-out (FIFO) mining affects the development of a regional population centre.

As an exploratory study, the project’s sample size is limited, thus it is difficult to make generalizations about findings. This study does, however, develop a series of potential tendencies that could be researched in more detail.

**How was research done?**

12 in-depth interviews were conducted with miners who reside in Whitehorse. These had a focus on the impact of fly-in/fly-out or drive-in/drive-out mining on community development. They were conducted with workers with a variety of backgrounds, including women, Indigenous persons, labourers, trades peoples, and managers.

**What were the research results?**

Workers involved in long-distance commuting mining held a range of perspectives regarding their workplaces, many of which are likely shared with the rest of the non-mobile mining workforce. Most workers interviewed responded positively to commuting and were content to travel. They felt long-distance commuting was part of the mining lifestyle. Local and non-local workers travelled for different reasons. Local workers seemed concentrated in labourer positions without job security, driving them to travel to find work. The two non-local workers interviewed were tradespeople who traveled because of high-paying positions and who noted many opportunities to work outside of their regions and the mining sector.

Most workers described a close-knit, masculine, workplace culture at their mines. Women and Indigenous people were underrepresented minorities in mining. Women were described by respondents as welcome, yet also as being concentrated in low-paying support roles and absent from underground mining positions. General comments also indicate that Indigenous people may face negative workplace environments at the mines. Some respondents brought up issues with safety in their workplaces. These issues could all be barriers to hiring and retaining a diverse workforce.

In terms of home life, those local, unmarried workers who were interviewed seemed to enjoy the lifestyle and were willing to travel long distances for work. Interviewees who were nonlocal workers with families provided more mixed experiences. Those who were highly experienced in local commuting may have adjusted to this lifestyle, while novices travelling long distances could experience more fatigue in both their commute and home lives.

**How can this benefit communities?**

This study offers a new perspective on fly-in/fly-out or drive-in/drive-out mining operations. It could give researchers new insight into the mining trend and lead to further studies on how mine workers adapt to these operations. For communities and policymakers, it can help design programs to better support mobile workers.

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**Chris Jones**
Lakehead University

**Theses and Reports**


**Publications**


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This research was supported by the Social Sciences and Humanities Research Council of Canada.
Traditional Knowledge on the Impacts of Diamond Mining on Caribou and Communities in the Western Arctic

Local diamond mining from 1988-2010 is associated with social and cultural changes in the community of Lutsel K’è, located on the East Arm of Great Slave Lake. The extent of mining’s impact on barren-ground caribou is unknown, but more can be understood through an analysis of black spruce tree rings, which reflect caribou movement. Supporting local community-based monitoring, which is most aptly suited to monitoring these changes, is key to understanding the full socio-economic, cultural, and ecological effects of resource development in northern Canada.

Kelsey Jansen
University of Alberta in collaboration with Lutsel K’è Dene First Nations

What is this project about?
This project collects and analyzes traditional knowledge and ecological data on caribou movement, using both Indigenous and scientific knowledge systems. It aims to understand how human activities—including resource development—have affected barren-ground caribou movements, link tree-ring analysis and oral history data, develop a set of community-based indicators to assist the community of Lutsel K’è in their monitoring of caribou movements, and engage and involve local youth in traditional activities and research efforts.

How was research done?
Research was done in collaboration with Lutsel K’è, and involved Denésélı̨nę elders, caribou harvesters, youth, and other students to track the effects of diamond mining activity on caribou movements over a three-year period. One part of the project involved youth through training activities related to environmental monitoring, computer mapping, and traditional knowledge documenting. This project involved an analysis of a 12-year data set on change in self-government, healing, and cultural preservation (many of which are associated with the diamond mining from 1998-2010), interviews on caribou movement patterns over the last century, and a tree-ring analysis of black spruce root samples taken from caribou trails in the Lutsel K’è traditional territory.

What were the research results?
Grounded in an Indigenous methodological framework and using dendroecology as a scientific assessment tool in combination with oral history analysis, this thesis assesses changes to caribou movement patterns in the traditional territory of Lutsel K’è Dene First Nation (LKDFN), Northwest Territories, Canada. This approach shows that Indigenous ways of knowing can set the basis for identifying the important research questions and methods, and that appropriate and complimentary scientific methods can be used to build upon that framework. This thesis provides a framework for those seeking to conduct ecological research by drawing linkages between Indigenous knowledge systems and scientific methods. This research project is not only about asking questions related to the impacts of resource development to the community of Lutsel K’è and the caribou on which they depend, it also demonstrates that Indigenous communities can embrace and implement scientific methodologies while remaining grounded in our own Indigenous knowledge systems and practices.

How can this benefit communities?
The community-based indicators, youth mentorship and training, developed as a part of this project may assist the community of Lutsel K’è in future caribou movement monitoring efforts. The findings from this research may be used to inform and provide recommendations to industrial developers in the region regarding the use of traditional knowledge in environmental monitoring. They may also contribute to knowledge of the impact of resource development on wildlife, which may help to inform future negotiations, socio-environmental impact assessments, and impact and benefit agreements.

Theses and Reports
Gender Relations and Gender-based Analysis at the Resource Development / Traditional Economy Interface

Much of the previous research looking at gender in resource development has focused on women as victims of resource development or its negative social outcomes. This has a victimizing effect and can narrow the scope of understanding what women really think is important to the North. Women’s perspectives on resource development’s impacts and participation in governance strengthen decision-making, ensuring agreements with companies are implemented, and addressing community issues.

What is this project about?

An initial ReSDA gap analysis found a lack of scholarship on governance institution’s gender dimensions and women’s leadership and perspectives in resource governance. This project is an attempt to address this gap. Its goals are to understand how decision-making and participatory processes related to northern resource extraction are gendered. It also sought to find out more about Indigenous women’s understanding of the relationships between increased resource development and gender relations, opinion of policy interventions, and preferred approaches to increasing community benefits.

How was research done?

Researchers conducted a scan of environmental assessments in three different projects in different regions along with focus groups in Tulit’a and Nain. Focus groups were 2 to 2.5-day-long conversations on open-ended topics. They involved representatives from women throughout different coastal communities of varying ages, economic occupations, affiliations with resource projects, and positions within communities.

What were the research results?

Most environmental impact statements portrayed women as passive subjects. There was an over-emphasis on employment in resource industries, which was heavily masculinized in a way that underrepresented women’s economic activities. When addressing subsistence activities, the focus was often on men’s participation. This marginalizes women’s participation in Indigenous knowledge production and the social economy. Women’s interventions in three environmental assessment processes re-centered the broader social economy.

The Nain focus group and interviews’ observations highlighted increased inequality, employment and opportunity inequality, and changes in sharing within social interaction. While the mine generated a lot of wealth, there was continued poverty and insecurity. This fostered a sense of inequality, injustice, and anger. Access to mining opportunities—particularly employment and related benefits such as wages, access to fresh food, materials for land-based activities, and addiction supports—were unequal. This was especially true for large regional centres when compared to coastal communities, which suffered from a lack of contact with the mine. In social interactions, reliance on cash transactions increased, while community sharing decreased.
The Sahtu focus group focused on concerns about gendered impacts of resource development, violence against women, and future generations. Gendered impacts of resource development affected the community’s capacity to provide meaningful input into decision-making. Participants highlighted the importance of mitigating cross-general impacts from negative experiences caused by resource development.

**How can this benefit communities?**

Having greater inclusion of women’s perspectives and participation in society within impact statements would broaden the scope of impact statements’ socio-economic assessments. This could be taken into consideration while negotiating community agreements with resource extraction companies.

By identifying women’s concerns about resource development and their opportunities for participation in governance, communities can address women’s barriers to participation in governance. This contributes to better decision-making and efforts to ensure agreements with companies are implemented. This can also help communities create programs to address community issues. For example, participants in the Sahtu study agreed to establish a Governance Group as well as spaces to support youth.
Inuvialuit Settlement Region Baseline Social Indicators

The Inuvialuit region has been affected by a number of resource boom cycles associated with the resource activities in the Mackenzie Delta and more recently in the Beaufort Sea. The Inuvialuit Regional Corporation (IRC) has been collecting and publishing selected socio-economic data to aid in decision-making process and provide public access to IRC members. Given a growing interest in Arctic resources within the ISR, IRC engaged in collaboration with a social impacts monitoring team of polar scientists to develop a system of indicators based on past experiences in ISR and across the Arctic, local relevance and data availability.

What is this project about?

The Inuvialuit Baseline Indicators project has been a collaborative effort between the Resources and Sustainable Development in the Arctic (ReSDA), Arctic Social Indicators (ASI) projects and the Inuvialuit Regional Corporation (IRC). The goal of the Inuvialuit Baseline Indicators (IBI) project is to develop a set of measurable, reliable and accessible indicators to monitor socio-economic conditions in the Inuvialuit Settlement Region (ISR) with an emphasis on tracking impacts of resource development. The effort is focused on creating a framework to be used by local actors to collect, manage and analyze community-based data.

How was research done?

This project began with a workshop in Yellowknife, 2011, where a research agenda was developed. Researchers analyzed data from the IRC and the Northwest Territory Bureau of Statistics from 1986 to 2009. Researchers analyzed a wellbeing indicator framework developed by the Arctic Council’s Arctic Social Indicators project. They also conducted some community consultations. Drawing from all of this, a set of Inuvialuit-specific indicators were developed through incorporating measures for areas of local concerns. The assessment was conducted for six domains: health and population, material well-being, cultural vitality, closeness to nature, education, and fate control.

What were the research results?

A declining percentage of part time workers indicates a movement from part-time to full-time wage labour. Despite this, there was a decline in real income associated with a rise in consumer prices during the late 2000s. A decrease in residents’ dependency on support income indicates an increasing overall wealth, but also increasing income inequality during periods of intensive resource development. 70-75% of the population graduated from high school, though this fell slightly in the early 2000s—human capital is likely leaking out from Inuvialuit communities.

Fewer families depend on country foods, which may indicate an increased reliance on imported food. This does not necessarily indicate lower participation in land-based activities, but rather a change in the nature of these activities. Long-term trends between 1986 and 2010 were positive for indicators such as educational, housing, engagement in hunting and fishing, and negative for indicators such as crime. Native language retention has declined in correlation with growing employment in the wage economy, and was...
especially low among youth populations. The analysis revealed considerable internal differences within ISR, especially between Inuvik and other communities. Although Inuvialuit appears to maintain relatively high levels of socio-economic well-being, it still faces considerable social challenges and has to deal with severe interregional inequalities.

On most indicators Inuvialuit was better off than other NWT regions (unemployment, engagement in traditional activities, land claim status and fate control) or close to average (incomes, dependency on government transfers, consumption of county food, education). The ISR fared worse than other NWT regions in respect to language retention and out-migration rates. In comparison with Inuit in Nunavut, Inuvialuit had generally higher level of material well-being, but very low language retention and consumption of traditional food.

**How can this benefit communities?**
The indicators developed through this project will help the IRC with community-based wellbeing monitoring, and are currently being further developed. This study identified levels of community development within Inuvialuit and identify socio-cultural issues that require attention and support from policymakers.
Understanding Resource Revenue Flows and How to Stop Leakages: A Case Study of the Yukon

Northern residents are searching for ways to ensure that resource development results in long-term prosperity and a larger share of its revenues stay within the region. This can be done through building up and using “linkages” that resource revenues to build sustainable economic activities. In order to strengthen linkages, it is crucial to first clarify how Arctic resource revenues flow. This first study focuses on the Yukon.

Lee Huskey
University of Alaska
Anchorage

Chris Southcott
Lakehead University

Publications

What is this project about?
Limited economic opportunities mean northern residents must find ways to use resource development revenues for sustainable economic activities. This project examines fiscal linkages that can be strengthened in order to mitigate the onset of a resource dependency.

The idea of comparing the different resource revenue regimes was one of the gap analysis projects that ReSDA initially undertook in order to clarify what should be the main research questions. This project is a direct result of the first two recommendations of that gap analysis.

How was research done?
This project draws from an earlier gap analysis and a staples theory model. Researchers examined existing fiscal indicators in order to develop a model for measuring linkages and revenue leakage. Projects were then analyzed in detail, including spending flows, linkages to the economy through interactions with local government and purchase of goods and services by those involved in the project, and economic rent.

The results of this study were highly sensitive to economic assumptions regarding factors such as operating costs per tonne of production, which were made based on available statistics taken from feasibility reports and surveys by the Yukon Government. The stage of resource development activity at the time, which consisted largely of exploration, along with the specific types of minerals developed also affected the revenue generated from mining activity. The study did not take into account more local levels of government, environmental costs, or other sources of revenue for the Yukon that might have been generated as a result of mining.

What were the research results?
Real economic rent was estimated in two parts: revenue that went to the Yukon Government and revenue that went to the rest of society. This initially estimated that economic rents flowed out of the Yukon about ten times more than the amount that stayed inside. A further study of staple linkages was then conducted, including backward linkages such as the amount of money spent by mining interest in the Yukon and amount of money spent by mine workers in the Yukon in addition the amount of money paid to the Yukon Government. The study’s final results estimated linkages to amount to $600 billion, approximately three times the external rent.

How can this benefit communities?
The model developed in this project can be used by communities and regional governments to monitor resource revenue flows from other resource activities. The project’s findings can help identify how to best strengthen linkages and which type of linkages can most effectively be targeted.
Facilitating Sustainable Waste Management in a Northern Community and Resource Development Context

Communities across the North are faced with decisions about waste management and food insecurity. Many regions share similar challenges of poor access to transportation, slow decay rates, lack of soil, small and dispersed communities, as well as specific socio-economic, cultural, and political circumstances. This is particularly true in the context of nearby resource development projects and locations housing workers associated with these projects. Initiatives that address both waste management and food security may also improve environmental sustainability. This study focuses on the municipality of Happy Valley-Goose Bay (HVGB) and the waste generated by Muskrat Falls. The lessons learned here will be of value to similar communities in the North.

What is this project about?

Previous considerations of waste management in the Happy Valley-Goose Bay (HVGB) region have been primarily of two kinds: studies of how to manage municipal waste collection, and diverse environmental studies associated with the existing landfill, past landfills, or military dumping sites. Neither kind has addressed the question of waste from resource development projects; neither has considered possible opportunities for benefitting from association with resource development projects; and neither has provided a holistic economic analysis.

The Town of Happy Valley-Goose Bay is presently acting on the recommendations of a Solid Waste Management Study completed in January 2013 by a consulting firm. The municipality desires a more direct consideration of the impacts and opportunities associated with the waste generated by the Muskrat Falls mega-project. This study assessed how waste timber from construction of the dam could be used to create a soil amendment (biochar) to grow beets and potatoes to improve food security and sustainable waste management.

How was research done?

A technoeconomic analysis was conducted on the economic feasibility of growing beets and potatoes in Happy Valley-Goose Bay using biochar, a high-carbon substance similar to charcoal. Market prices and agronomic field trial data were used to evaluate economic impacts from improvements in plant yields. At the same time, the costs were calculated to produce the biochar from the waste wood cleared in the construction of the Muskrat Falls hydroelectric dam. The technoeconomic study built upon qualitative data collected from community partners and experts in waste management.

What were the research results?

Preliminary results from beet trials indicate that increases in agricultural yields cover the costs of growing the crops, as well as the costs to establish a new biochar production plant. Though based upon only two years of field data, a profitable situation is highly likely, even when conservative values are used. However, without agricultural production it is unlikely for the biochar production plant to be profitable as a stand-alone venture. The findings indicate that...
there is a solid case for expanding agronomic field studies in Happy Valley-Goose Bay, and elsewhere, in order to approach joint goals of improving food security and sustainable waste management.

How can this benefit communities?
ReSDA’s primary objective is to assist northern communities in increasing benefits and mitigating negative impacts from resource development. This project directly targets that objective in the area of waste management. The findings from this study will benefit local waste management policies and decision-making. Given the similarity of HVGB’s geographic challenges and socio-economic and cultural conditions, this information may also be of use to other communities in the territories, northern provinces, and to some extent, abroad.

Results from the techno-economic research phase demonstrate that it is economically feasible to grow beets (and to some degree, potatoes) with biochar as a soil amendment. These findings may provide encouragement to other communities to pursue agricultural or test bed field trials. If successful, the findings could be replicated elsewhere in the North and chip away at food insecurity challenges. All articles from this study are available through open access. The *Detritus* article by Keske, Mills, Godfrey, Tanger, and Dicker (2018) presents an Excel spreadsheet budgeting tool that may be modified by interested communities to reflect their specific situation. The *Food and Energy Security* paper (Keske, Godfrey, Hoag, and Abedin, 2019) outlines results of the Happy Valley-Goose Bay agricultural field trials and provides suggestions for making agriculture and biochar co-production economically feasible.
Non-renewable Resource Development, Homelessness & the Potential for Community-based Housing Governance and Policy.

Housing insecurity has been a concern in the Northwest Territories (NWT) since the establishment of settlements and the introduction of state-run housing programs in the mid-20th century. Chronic housing need is worsening in many settlement communities while homelessness is on the rise in urbanizing northern centres. There has been significant public concern regarding the impact that oil, gas and diamond mining industries have on accessible and affordable housing, particularly in Inuvik and Yellowknife.

What is this project about?
The purpose of this research is threefold:
1) to explore the current housing policy landscape in the NWT regarding the provision of public and subsidized housing, including supportive/transitional housing programs in Yellowknife, the largest NWT community;
2) to analyze the impacts that non-renewable resource development has had on affordable, private housing in the NWT; and
3) to explore means of mitigating negative impacts, including recommendations for policy collaborations between northern communities, governments and Industry, as well as Industry requirements to include housing affordability plans within their corporate responsibility portfolios.

How was research done?
Researchers conducted qualitative research using targeted sampling, open-ended interviews, and content analysis. This research assessed contemporary NWT housing policy; conflicts between housing policy and employment within the non-renewable resource development sector; and the specific effect the dynamics of non-renewable resources has on housing in Inuvik and Yellowknife. It also engaged with policymakers and frontline workers to advance policy recommendations within the NWT policy and economic landscape through a collaborative design project and the creation of a publicly accessible pamphlet outlining recommendations for future housing possibilities in Yellowknife.

What were the research results?
The results of this project concluded that it is challenging to establish long-term affordable housing options in the context of a resource-based economy. The landscape of affordable housing in Yellowknife, that relies on both a public and private monopoly, is very vulnerable to the busts and booms of a resource-based economy. However, given the challenges faced by policy-makers, it was apparent in this research and in our community consultations, that there are established organizations, potential inter-governmental collaborations, and new funding opportunities that will help create new pathways for creating affordable housing throughout the region.

How can this benefit communities?
This project provides information to northerners on innovative practices implemented in other parts of the circumpolar North and the world. This will allow northerners to compare their particular situation to others and to better understand options available. A key focus of the research was to make sure research is readily accessible to affected communities, and maintain active communication with research partners, community-based organizations, and policymakers. A detailed pamphlet, created through multiple consultations and through a collaborative design project, that outlined the housing challenges faced by Yellowknifers and provided ideas for future housing options, was sent out to all residents of Yellowknife, provided to all community partners, and discussed in several media outlets. In addition to two books chapters, this pamphlet will benefit the local community to have resources to support their on-going advocacy and policy work related to housing in a resource-based economy.
Augmenting the Utility of IBAs for Northern Aboriginal Communities

Impact and Benefit Agreements (IBAs) have become institutionalized in northern Canada in that it is infeasible for a firm to develop a mine today without securing the contractual support of regional Aboriginal communities. They have grown in use and innovation, yet there is a growing sense among analysts and communities that IBAs fail to meet expectations. They remain in an uncertain position in mine permitting, especially relative to regulatory processes like Environmental Assessment (EA) and the Crown’s consultation obligations.

What is this project about?
There has also been limited use of adaptive management to address social impacts as they emerge within IBA-signatory communities, and consistent fear that community well-being is declining, not increasing through IBA-enabled mine developments. Applied research is needed to augment the utility of IBAs. This research aims to assist communities that have signed IBAs.

How was research done?
This project included a project planning phase focused on engaging the leadership of four partner communities and establish a framework to work with them as well as a memorandum of understanding. Following this, researchers used community surveying tools, including interviews, focus groups, and participant observations; developed adaptive management strategies; and adhered to principles of integrated knowledge mobilization.

They assessed IBA performance using a mix of assessment tools, including the use of community relevant wellness indicators, and identifies and realizes opportunities for improved adaptive management to better manage observed social impacts. Researchers reflected upon and sought to optimize the interaction of IBA negotiations/implementation with public regulatory processes like and the execution of the Crowns consultation obligations and mobilized co-generated knowledge for communities and for the scholarly world.

What were the research results?
Ongoing.

How can this benefit communities?
Given the prevalence of IBAs in negotiations between the non-renewable resource industry and Indigenous groups, they are key to ensuring Indigenous needs and concerns surrounding resource development are taken into account. Augmenting their utility helps to ensuring communities receive benefits from resource development projects and experience less negative effects as a result of them. This research works closely with communities that have signed IBAs, and thus will produce resources that may be useful for them in ongoing and future negotiations as well as in IBA implementation.
Although education, training and employment comprise significant indicators of community well-being, there is a lack of research that examines the nature of training agreements across circumpolar regions, including levels of community involvement in decision-making, and actual outcomes in terms of developing long-term, sustainable employment opportunities for local people. This information is particularly important for communities negotiating impact and benefit agreements (IBAs) with resource extractive industries. This is because these agreements tend to contain non-disclosure clauses which do not encourage communication within or between communities about the benefits derived from these developments.

**What is this project about?**

This project involved examining the provision for training and employment, associated with the Mary River Inuit Impact and Benefit Agreement that was negotiated between the Qikiqtani Inuit Association, representing the Inuit of Baffin Island, and Baffinland Iron Mines Corporation. Based upon Article 26 of the Nunavut Land Claims Agreement, project developers must negotiate an Inuit Impact and Benefit Agreement with regional Inuit organizations, and offer compensation, royalties, local employment and training, and business contracts. The Agreement is supposed to ensure that the five signatory communities in the Qikiqtaaluk region specifically benefit from the mine through royalties, priority-hiring arrangements, and education and training programs including trades apprenticeships.

**How was the research done?**

The research primarily involved:

- Gathering perceptions from Inuit workers who were either employed, or had been employed, by the mine.
- Gathering insight about provision for vocational education training and employment from different program stakeholders, including government, training delivery agents, and community members.

Interviews with workers and stakeholders occurred over the summers of 2015 and 2016. Most interviews occurred in the north Baffin community of Pond Inlet, with some stakeholder interviews also occurring in Iqaluit. The same workers were interviewed twice over both time periods in order to better understand the opportunities and challenges associated with employment with the mine. A total of forty-eight interviews and one focus group were conducted with workers. Most workers were men, and the majority were in their twenties. Workers were either continuously employed at the time of interviews (n = 5); employed and subsequently laid off between interviews (n = 4); had been laid off for over a year (n = 12); or had never gained employment, but had applied (n = 2).

Eleven interviews and two focus groups were also conducted with stakeholders during both phases of the field work. Stakeholders...
included community members involved in education and health care, residents who had a longstanding knowledge of the community, and representatives from various levels of government, including municipal, regional, territorial, federal, and Inuit organizations. While several conversations occurred with mine representatives, no formal interview was granted.

What were the research results?
At the time of the research, significant challenges impacted the provision for training and employment. An overarching theme that emerged related to miscommunication between workers and the various stakeholders responsible for implementing training and employment with the mine. In turn, misunderstandings resulted in frustration over the dismal recruitment and retention rates, which fell short of the employment goals identified in the Agreement. Factors contributing to the poor outcomes include:

- cross-cultural differences between workers and employers, relating to conflict resolution, language barriers, as well as attending to family responsibilities. These forms of miscommunication contribute to significant misunderstandings relating to recruitment, training, and termination of employment;

- capacity of various stakeholders responsible for implementing the Agreement is compromised by high turnover rates experienced by the project, government, and Inuit organizations, which in turn erode the capacity to effectively communicate, as both the commitment to uphold the nature of the agreement, as well as the institutional memory to enact it, are lost with each change in personnel;

- weak internal capacity leads to weak linkages between the various stakeholders—linkages that are needed in order to fulfill training provisions of the agreement.

How can this benefit communities?
This research provides an opportunity to assess the challenges associated with fulfilling training and employment provisions contained in impact and benefit agreements. By understanding barriers to achieving training and employment with mines – particularly long-term employment in the skilled trades – communities are better able to enter into negotiations with realistic expectations. The research also helps communities mitigate some of the challenges and inevitable frustrations that can erode trust between the different stakeholders responsible for implementing agreements.

Maintaining community-based monitoring that is developed in partnership with community members and other supporting organizations independent of IBA signatories will help ensure that lines of communication are open. Long-term community monitoring will increase levels of trust and communication needed to gain accurate and reliable information that can then be used to identify communication gaps between what is being presented by IBA signatories and what is being understood by workers.
Global Citizens in the Arctic: Learning to Live in the NWT, Yukon and Nunavut

Mining and other extractive industries bring many kinds of economic opportunities to the North including opportunities for those from other countries. Although hiring of northerners is a priority for many industries and governments, in some regions, labor shortages and/or employment opportunities in both low-skilled and high-skilled occupations have let to federal policies that encourage in-migration from other parts of Canada and the globe. Consequently, many northern cities and small communities are increasingly multicultural with growing communities of Philipino, Middle Eastern, African, Asian and European peoples.

Cynthia Amati
University of Alberta

Publications

What is this project about?
This study seeks to find out how newcomers to the Arctic from other countries are coping with a new, very different kind of environment. It explores their adaption to the resource-based northern economy, particularly how new residents (international immigrants) settle, live and use their local and global social networks to make a living within this economy.

The project examines their perceptions of the north and its influence on their cultural identities, the differences in the experience of men and women from different cultural backgrounds, and the significance of social connections in supporting adaptation to the North.

How was research done?
Narrative interviews and focus group conversations were carried out with a cross section of new permanent residents and citizens from around the world residing in the North, as well as with multicultural family centres. The study offered an opportunity for multicultural engagement and reflection. In 2013, fieldwork was started in two regions: the Northwest Territories and Yukon. To date, 40 interviews have been completed with individuals who have lived in the North less than 5 years. Preliminary analysis indicated that even though promising economic opportunities played a significant role in motivating the transnational move from various countries to the North, transnational families tended to, and preferred to live in the Territories long after economic rationale waned. This was reportedly due to deep connectedness to the open natural landscape, and the sense of community that they found and helped create in the North.

What were the research results?
Ongoing

How can this benefit communities?
The results of the study can be used by communities to better understand, adapt to the presence of, and support international newcomers to the Arctic. It may also provide a valuable resource for newcomers, particularly newly-arrived or soon-to-arrive, in adapting to their new contexts. Results of the study will be communicated through plain language (“community reports”) and workshops to be shared with the participants via cultural organizations and heritage activities.
Creating Sovereign Wealth Funds for Aboriginal and Northern Local Communities

Sovereign Wealth Funds (SWFs) typically comprise government revenue from natural resources or non-renewable revenue, which is then converted into a renewable financial pool of capital through investing part or all of the revenue earned into other forms of investments, often foreign investments. Norway, Alaska, North Dakota, and Chile are four examples whereby the use of SWFs has led to creating greater investment stability and creates intergenerational wealth. There is a lack of research into the potential for SWFs to provide to economic development, especially for Aboriginal, northern, and remote communities. In Canada, most northern communities are predominantly aboriginal and with resource industry as the primary economic sector, which creates opportunities for the creation of SWFs for Indigenous communities.

What is this project about?
This research project examines the notions of Aboriginal and community-level Sovereign Wealth Funds and the extent to which it can serve as a tool for northern communities to take advantage of the financial benefits received from resource development and manage those benefits to spread wealth over generations to maximize sustainability. We have seen that Aboriginal people in Canada have been able to negotiate far more significant arrangements with resource companies than they could in the 1960s and 1970s, leading to substantial economic benefits to Aboriginal communities. This research project documents the existing and potential opportunities for creating SWFs in Aboriginal and Northern local communities, and proposes recommendations for how this can be accomplished.

How was research done?
The research consisted of conducting a gap analysis on the literature and compiling expert information on Aboriginal trusts and Aboriginal Sovereign Wealth Funds. The gap analysis summarized the research on past and current, and failed and successful Aboriginal and community-level SWFs in Canada and beyond. Through synthesizing the existing knowledge, the proposed research project will then compile the lessons for best practice in creating and managing SWFs. A research assistant conducted the literature review and gap analysis, which dovetailed and expanded on their area of research. The project involved travel to Anchorage, Edmonton, Vancouver and Yellowknife to collect qualitative data through interviews with experts on Aboriginal Trusts and Aboriginal Sovereign Wealth Funds.

What were the research results?
Ongoing

How can this benefit communities?
Through providing a gap analysis on the current literature on Aboriginal and community-level Sovereign Wealth Funds and recommendations for best practices, this proposed research project aims to develop and disseminate this knowledge, so that communities in the region can utilize it to their benefit.