

## Initial Subproject Draft Descriptions

### *Dealing with bust and closure*

This subproject will examine social planning and innovation interventions related to the challenge of boom-bust economies and closure in northern communities. The goal is to examine historical and contemporary examples of social and economic adjustment in resource peripheries to what has been described as the “resource roller-coaster,” with a particular focus on how regional planning and governance bodies (including Indigenous communities and land-claim organizations) have historically responded or are now confronting these challenges. Drawing from staples theory, environmental history, and resource geography, this project will integrate perspectives on past and present boom-bust transitions to generate insights and concrete strategies for social innovation in response to economic downturns and closures in the resources sector. It will also assess the role of environmental remediation in ensuring sustainable post-extractive futures. To generate insights relevant to the Northern context, the investigators and their students will build on their extensive existing knowledge and relationships in Northern communities to identify key sites, collaborators, and evidence. Archival data will illuminate comparative perspectives on economic and social adjustment to resource busts and closure. Key informant interviews or community records will provide additional insight into local impacts and adaptations in response to these challenges. Through interviews, participatory workshops, and other community-based methods, this project will assist communities in identifying strategies for mitigation, adjustment and diversification in response to resource busts, and contribute to the nascent literature on “social closure.”

### *Finding socially Innovative ways to use employment and training to support sustainability*

Resource development has had an undue influence on the development orientation of northern communities. Consequently, many employment and training initiatives have narrowly focused on increasing Indigenous representation on resource development projects (Abele 1989). Though Indigenous governments have negotiated increasingly detailed employment plans in impact and benefit agreements, these programs have often fallen short both in employment numbers and in the quality of training opportunities. Following the dominance of resource activities in northern communities, researchers studying northern wage employment have often focused their attention employment and training initiatives that aim to increase the representation of Inuit in resource industries. This research has particularly sought to address continuing high turnover of Indigenous workers as well as their under-representation in higher skilled positions and on northern resource projects altogether (Hodgkins 2018; Mills 2018; Mills and Sweeney 2013; Rodon and Lévesque 2015). Importantly, research about IBA employment programs has revealed a variety of barriers to Indigenous participation including: structural and overt racism, poor communication with remote communities, as well as challenges resulting specifically by fly-in, fly-out work that regularizes south-north patterns labour movements and isolates Indigenous workers from their families and communities. Notwithstanding the significance of the above research, some commentators have suggested, that a key reason for low uptake of Inuit

into jobs on resource projects is that many Inuit desire livelihoods that do not involve working on remote industrial worksites but instead involve land based activities, opportunities for wage work in their home communities as well as sharing and volunteerism (Rodon and Lévesque 2015).

Research about employment and training initiatives outside of those encouraging employment on large resource projects, however, is notably lacking. In particular, some Indigenous governments are aiming to divert funds from resource development projects in their territories to support a broader array of training and employment initiatives. Other communities are harnessing government employment and training funds in innovative ways to provide Indigenous northerners with skills that can be used both within beyond working industrial resource development while also providing wage employment that builds on on the land skills. For example, the Indigenous Guardian Program provides training in environmental monitoring and assessment that can be applied to resource projects in boom times while also providing employment in between interperate resource projects (Wilt 2017).

The proposed research will adopt an Indigenous political economy perspective building on the work of Abele (1996), Nahanni (1992), and more recent interventions by Kuokkanen (2011) and Kennedy et al. (2018), that centre the multiple roles of lands in understandings of economic development and livelihoods. This perspective sees northern livelihoods as balancing wage employment with traditional land based activities, volunteerism, sharing and government transfers, while also understanding how employment and training opportunities are structured by capitalist resource development and the neoliberalization of state employment and training funding. In particular, we will ask:

1. What types of employment and training programs are desired by northern communities?
2. How do these desires match employment training programs available?
3. Which employment and training programs have worked best to support long-term community sustainability?
4. Which programs have socially innovative ways to ensure greater contribution to long-term sustainability?

We would do a series of case studies comparing employment and training programs in various instances across the region. This would use existing research already conducted by ReSDA and elsewhere and build on it from the point of view of social innovation. Which programs have been most successful at innovatively ensuring employment and training meets the long-term needs of communities? For example, are there programs that are able to mitigate the boom-bust dynamics of resource development or foster broader skills among Indigenous youth.

The case studies would be based on the following theoretical perspectives and research methods: This research would also include a literature review of socially innovative employment and training possibilities in other areas of the world. This literature review would be a joint project of SISARD, MinErAL, and REXSAC and would be assisted by Nordregio and CRISES (CRISES are the social innovation folks at UQAM).

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### *Business Development*

The impact of extractive industries on business development is under-researched (Kemp, 2010). There are claims that mining enhances the small and medium business sector, increases the level of employment and generates business income (Evans & Sawyer, 2009; Horowitz et al., 2018). However, comparative or evaluative research on mining induced business development – either by region, commodity or locale – is lacking. This project proposes to continue and extend the comparative research on local business development in the Canadian Arctic. We developed and administered a survey to Inuit companies in Nunavik and Nunatsiavut. The survey assessed and compared the impacts of mining operations on the level of business development and employment in the two regions. The results of this project show that most businesses, in Nunavik and Nunatsiavut, do not significantly benefit from mining and exploration activities. The results also show that although partnering up with non-Inuit businesses increases the proportion of revenues an Inuit business receives from mining, it tends to reduce Inuit employment compared to other businesses that do not partner up. It is important to extend this study into the other two Inuit settlement areas in Canada (Nunavut and the Inuvialuit Settlement Region) to conduct further comparative analysis and to evaluate the impacts of different institutional arrangements, mining policies and definitions of Inuit businesses. Extending the scope of this analysis into Nunavut and Inuvialuit will provide a thorough assessment of how mining and extractive industries have impacted business development across the Canadian Arctic and whether local businesses have the capacity to benefit from the developmental opportunities available. We wish to derive constructive insights and recommendations for regional and local business support and for negotiations between communities and local governments with extractive industry companies. We also would like to further analyse the impacts of extractive industries on migration and employment.

### Methodology

This project proposes to assess the impacts of mining on business development through focus groups and extending the Inuit business survey to the other two Inuit settlement regions (ISR). Focus groups were instrumental to the design of the business survey in Nunavik and Nunatsiavut and provide an opportunity to understand the business environment in each region. It also helps to identify business owners who are willing to participate in the survey. The survey will be administered to as many businesses as possible in Nunavut and the ISR. Local research assistants will be recruited to administer this survey in person with local business owners. Once results are collected, they will be analysed to determine the extent to which businesses derive benefits from extractive industries, what type of jobs are created and to what extent employees find jobs in the extractive industries, local Inuit businesses or regional government positions. We will analyze results and their implications with local partners in feedback and validation workshops in the regions. In Nunavut this will involve the three regional Inuit Associations that are responsible for negotiating impact Benefit agreements (IBAs). We will then bring together government and Inuit business representatives from all four Inuit settlement regions to share insights, recommendations and potential coordination between regions. This will also be a good opportunity to create a new knowledge sharing network for follow up work and continuous efforts to improve conditions for Inuit businesses and employees.

*Finding socially innovative ways that communities can deal with gendered boom health impacts related to resource development*

In 1997, an Indigenous women's group in Labrador prepared a report on the concern's of women surrounding Voisey's Bay. (Annait, 1997) They listed 10 main concerns which included Community Life, Housing, Family Life, Violence against Women, Increased Alcohol and Drug Abuse, and Social Services and Agencies. There was a clear concern here with the health and well being impacts brought on by the "boom" of the mining activities.

In 2010, a report on research needs relating to the Meadowbank Mine by researchers associated with the National Aboriginal Health Organization noted " Most of the comments the team heard about the mine"s impact on human health described negative consequences. Although participants expressed great appreciation for existing health services and programs, they still noted shortcomings in the provision of health services and persistent difficulty in accessing doctors and hospitals as negative impacts, along with increased drug and alcohol abuse and addiction, spousal abuse, and domestic violence." (Knotsch, Bradshaw, Okalik, & Peterson, 2010: 9)

In a workshop on resource extraction at Pauktuutit's 2012 Annual General Meeting, "not having a voice" was one of the primary concerns of attendees. *Other concerns raised about the social and health effects of mining activity included a lack of opportunity to share information between the Inuit regions, lack of childcare services, increasing STI rates and public intoxication, women's limited financial literacy and women's lack of awareness of their basic human rights.*" (Pauktuutit, 2014: 6)

From the Pauktuutit Report of 2013 on Baker Lake further noted:

- Alcohol consumption increased
- Domestic disputes and domestic violence reports increased – result of 2 week on 2 week out schedule “Women reported on the inadequacy of the women’s shelter in the community. They advocated a better shelter for women as well as one for men. Women reported that mental health services in the community are inadequate. The turnover of staff creates problems for the continuity and effectiveness of services available to them. It is recommended that more creative ways of accommodating the family obligations and needs of women be explored by mine management in consultation with women employed at the mine.”  
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### Possible project

There is much concern about the impacts on health and well being, especially among women in northern communities. There is a fear that the boom brought on by a project, by bringing more money and jobs into the community also brings problems for women and families and general.

Despite this there has been very little quantitative analysis of the phenomena. Almost all data comes from qualitative data measuring the concerns of the community. Yet this is one area where quantitative data is likely to exist in the form of crime rates, police statistics, health services statistics, alcohol purchase records etc. New indicators could also be created if this existing data is not accessible.

A project under SISARD could look at this in a number of ways. It could try and use existing data to look at impacts at various sites across the Canadian North in an attempt to determine which methods are best for mitigating these negative impacts. Community groups could then be utilized to provide socially innovative options for policies and programs to deal with these impacts in a way that enhances the long-term sustainability of communities.

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*Using extractives to improve food security*

### Constraints to the Adoption of Agricultural Technologies in Northern Regions of Canada

Over the past decade important advancements have been made in the development of new technologies designed to enhance agricultural production in the Canadian north. Some of these technologies include, hydroponic systems, agridome facilities, innovative greenhouse instrumentation and low-cost designs, and computer-controlled LED lighting systems for year-round fruit and vegetable production. These technologies have great potential for alleviating food

insecurity by providing a source of healthy and affordable foods for northern communities. For their part, Federal and Territorial Governments have directed considerable financial resources to help make these technologies available. Notwithstanding their potential, it has yet to be determined what constraints may exist that would limit local adoption of these new technologies. Research conducted in other food insecure regions of the world have long found that despite the great potential for technological advancements to improve food production capabilities, there are often unforeseen cultural, economic, political and policy constraints that limit technological uptake. In this research we will examine the innovations being made in northern food production and will identify the constraints that may hinder adoption.

### *Opportunities for Establishing an Arctic Foods Innovation Cluster (AFIC)*

Within the Arctic region there are considerable opportunities for commercial food production, both for export and for meeting local food needs. Food industries are producing large volumes of food commodities that are culturally compatible with indigenous\local food preferences and also have high export value. For example, in 2017, Canada's Arctic regions exported in excess of 75,163,383 kg of fish and other marine products to international markets. This export had an estimated value of \$797,960,562 CAD (Chen and Natcher, 2018). The production and distribution of these products involves a value chain of over 315 domestic and international actors, including producers, processors, transportation services, and wholesalers. Yet the Arctic foods value chain is challenged by a host of social, economic, logistical, and political obstacles. Industries located along the value chain tend to be fragmented and have little to no coordination or communication. This has perpetuated an overreliance of raw export, bottlenecking of distribution points, and limited innovation in primary and secondary product development. Given these conditions we will examine the requirements for establishing an Arctic Food Innovation Cluster (AFIC). An AFIC would pull together relevant actors in the Arctic food value chain for a cluster-focused approach to food production and regional economic development. A cluster-based approach to food innovation would draw together Arctic food producers with governments, Indigenous communities, universities, research centers, vocational training providers, and industry associations with a shared aim of increasing the Arctic's competitiveness in food industries. The objective of the AFIC would be to create value by connecting northern entrepreneurs and southern-based investors and businesses that have knowledge and interest in the Arctic food industries. With hubs located in each Arctic country, the Cluster would focus on business incubation, networking, consulting services, and research in areas of economics, logistics, biotech development, and by-product utilization. Partners in the AFIC will gain competitive advantage as professional linkages are established, knowledge spillovers are enhanced, and innovations in the Arctic food system are achieved. The benefits of this approach include economic development opportunities for Arctic communities as well as alleviating conditions of food insecurity for northern residents. These benefits will grow exponentially as collaborations mature and innovations emerge.

### Reference

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