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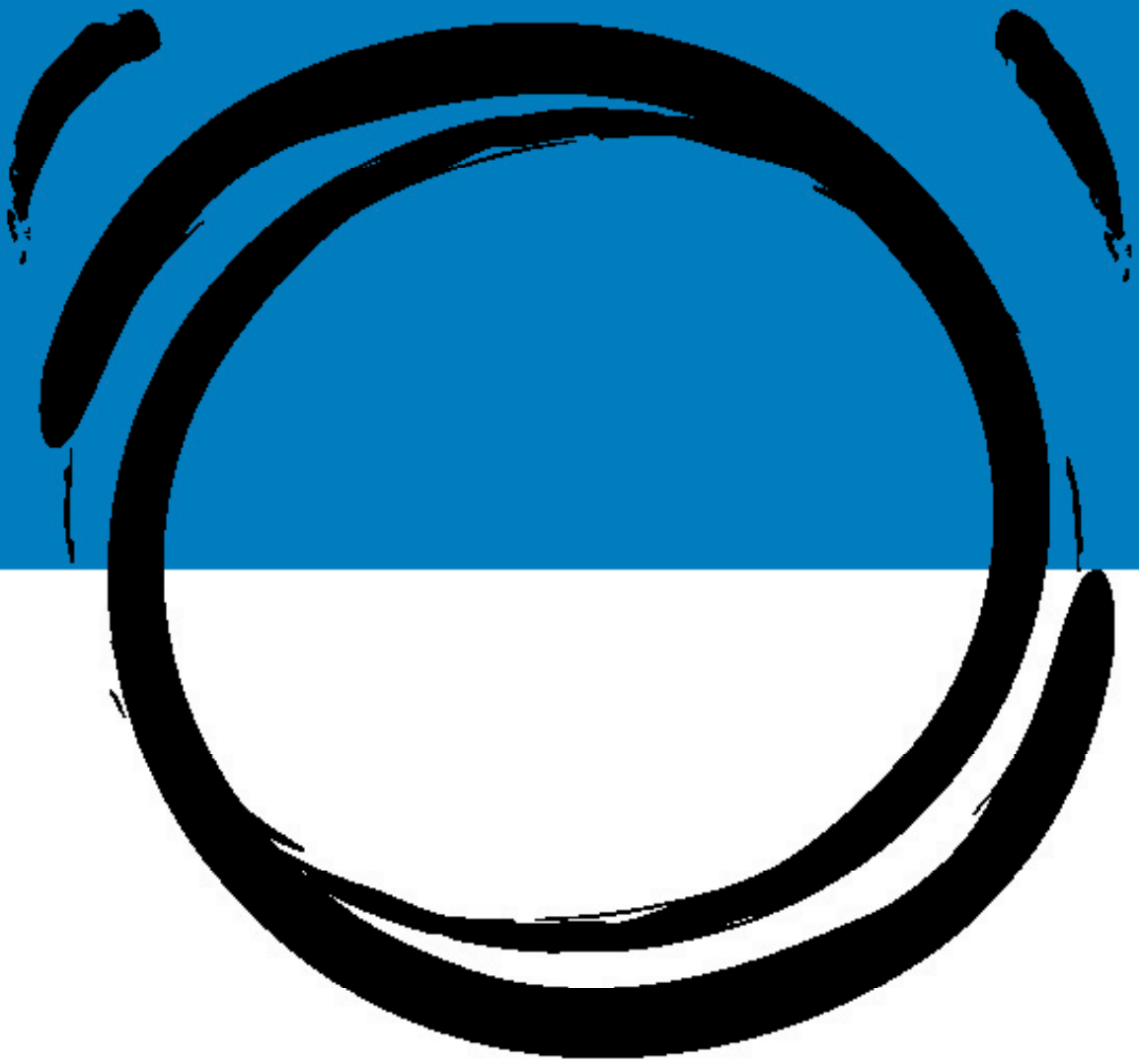

Resource Extraction Development and Well-Being in the North

A Scan of the Unique Challenges of Development in Inuit Communities

Mark Buell,
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June 2006

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Resource Extraction Development and Well-Being in the North:
A Scan of the Unique Challenges of Development in Inuit Communities

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Ajunnginiq Centre

The Ajunnginiq Centre of the National Aboriginal Health Organization shall promote practices that will restore a healthy Inuit lifestyle and improve the health status of Inuit, through research and research dissemination, education and awareness, human resource development, and sharing information on Inuit-specific health policies and practices.

The Ajunnginiq Centre's five main areas of focus are to:

- Improve and promote Inuit health through knowledge-based activities;
- Promote understanding of the health issues affecting Inuit;
- Facilitate and promote research and develop research partnerships;
- Foster participation of Inuit in the delivery of health care; and,
- Affirm and protect Inuit traditional healing practices.

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ᐅᑭᐅᖅᑕᖅᑐᒥ ᓄᓇᖕᓂ ᑲᓇᑕᐅᑉ ᐱᑕᖅᑎᑕᐊᖅᓯᑦ ᓄᓇᒥᐅᑕᓂᒃ ᐱᒃᔪᐊᑎᒃᓴᓂᒃ. ᐱᑎᐊᖅᓯᒪᔪᓂᒃ ᐅᖅᓯᐊᓗᒍᑎᑦ ᐊᒻᒪ ᐃᓴᓕᒥᑎᑦ ᑕᐃᒪᓐᓄᑦ ᐊᒻᒪ ᓂᓱᓄᑦ, ᐅᑭᐅᖅᑕᖅᑐᖅ ᐅᑉᐸᒍᓕᖅᑎᑦᑕᖅᑉᓪᓕᐊᐅᖅ ᐱᒃᔪᐊᑎᒃᓴᓂᒃ ᐱᓚᓪᓕᐊᑎᑎᓯᒪᔪᓄᑦ. ᑕᐃᒪᓕᒃ ᐱᓚᓪᓕᐊᑎᑕᑎᓂᖅ ᑎᑭᐅᑕᐅᓚᖅᑲᓕᐊᖅᑎᓪᓗᒍ ᑭᓇᐅᖅᓯᒪᔪᓄᑦ ᐃᓇᓐᓄᑦ ᑭᓚᒥᑦᑐᖅᑐᑎᒍᑦ ᐃᓇᓐᓄᑦ ᑭᓚᒥᑦᑐᖅᑐᑎᒍᑦ ᐊᒻᒪ ᐱᓚᓪᓕᐊᑎᑕᑎᓂᖅ ᐊᒻᒪᑦᑕᐅᐅᖅ ᐱᓚᓪᓕᐊᑎᑕᑎᓂᖅ ᐊᒻᒪ ᐃᓚᖅᑲᓇᑕᖅᑐᑦ ᐃᓕᓴᐅᔪᓂᒃ ᐊᒻᒪ ᐅᑕᕐᓂᐊᕐᓗᒍ ᐊᑐᖅᑐᑦ ᐱᓚᓪᓕᐊᑎᑕᑎᓂᖅ

ᐃᓄᐃᑦ ᓄᓇᓕᖅᑎᑦ ᐃᓕᖅᑯᓯᖅᑯᑦ ᑕᐃᖅᑯᓇᓐᓂᐊᓐᓇᖅᓯᒪᔪᓯᖅᔪᑦᑐᑦ. ᑕᐃᓕ ᐱᔨᐅᑎᖅᓴᓂᖅ ᐱᓇᓯᐊᖅᓂᔭᑦ ᐱᓕᕆᓕᐊᑎᑦᑎᓂᖅᖢᖅ ᐊᖏᑦᓱᒃᓴᓯᖅᔪᓚᒪᓕᑦ ᐊᒪᓕ ᐱᖅᓇᐊᖅᖢᖅᓯᑎᖅ ᐊᒥᓯᓂᖅ, ᐊᐅᖅᓕᑕᕐᑐᓂᖅ ᐃᖅᑲᓇᐃᔨᖅᑎᓂᖅ ᑎᑭᒋᑦᐊᓯᖅᓂᖅ ᖃᖅᓕᔭᓕᑦ ᓄᓇᖏᓐᓂᑦ. ᑕᐃᒪᓐᓇᖅ ᐅᓕᐃᓴᖅᑕᐅᖏᑦ ᓄᓇᓗᓕᑦ ᐊᐅᓕᔨᓴᓯᖅᑯᑦ ᐊᑕᐃᖅᑲᓇᐊᖅᓴᖅᑯᑦ ᖃᐅᔨᔨᐅᓯᒪᔭᑦ ᐊᒥᓯᓚᓕᓐᓂᑦ ᓴᖅᑭᓕᕐᓂᓕᔭᑦ ᐃᓕᒥᔨᐅᓕᖅᑎᑐᒃ: ᐃᓯᒪᐅᓴ ᖃᓄᐃᓐᓂᖅᓂᖅ ᐊᑕᑐᖅᓯᓂᖃᖅᑐᑦ; ᐃᓄᐊᖃᖅᑕᑦᓂᖅ; ᐱᑕᖃᓕᐅᒥᓂᖅ ᔪᔨᓐᓂᒃᔪᑦ ᐊᐃᑕᑐᑎᐅᓐᓇᖅᑐᓄᑦ ᐊᐃᑕᑐᖅᑕᐅᖃᖅᑕᑦᓂᖅ; ᐃᒥᐊᓗᒪᒧᑦ ᐃᓕᓐᓂᐊᓕ ᐊᑦᑐᖅᑕᐅᓯᒪᓂᑦ ᐱᖅᓯᒪᓂᖅᓂᖅ; ᓴᓇᔨᓐᓄᑦ ᐃᓕᓐᓂᓴᑦ ᐊᑦᓂᖅᓯᒪᓂᖅ ᐊᒪᓕ ᐱᖅᓯᓕᕐᑎᑦ; ᐱᖅᓇᐊᑐᐊᖅᓯᓂᖅᓂᖅ ᐊᒪᓕ ᐱᖅᓇᐊᑐᐊᖅᓯᓕᕐᓂᖅ ᐊᑐᐃᓐᓇᕐᓂᕐᓂᖅ <ᐃᓇᓴᐊᑎᓄᑦ; ᐊᒪᓕ, ᐱᑭᐊᖅᓯᖃᑦᑕᓂᖅ.

ᐱᑕᖃᑎᔨᓕᓴᐅᓪᓗᓂ ᑕᐃᒫᓴᓇᓕᓐᓂᐅᓂᖅᖢᖃᖅᑐᑦ ᑭᓇᐅᔭᓕᐅᖏᓐᓂᖅ ᐃᓄᐃᑦ ᐊᒪᓕ ᑭᓇᐅᔭᓕᐊᖏᓐᓂᖅ. ᑕᒪᓐᓇ ᑕᐃᒪᐃᓕᓗᐊᖃᖅᑎᑎᓂᖅ ᑭᑑᑎᖅᓯᓕᕐᓂᖅᖢᖅᑐᑦ ᐃᓄᐃᑦ ᐊᒪᓕ ᓄᓇᓕᑦ ᐃᓗᓴᖏᓐᓂᖅ ᐊᖏᓐᓇᖅᑐᖅ, ᓴᖅᑭᑦᓕᓕᐊᓕᓴᓗᓂ ᐃᓯᒪᐅᓴ ᖃᓄᐃᓐᓂᖅᓂᖅᖢᖅᑐᑦ ᐊᒪᓕ ᐱᖅᓯᓕᕐᓂᖅᓂᖅᖢᖅᑐᑦ ᐊᒪᓕ ᐃᓚᖏᓐᓂᖅᓂᖅᖢᖅᑐᑦ, ᐊᒪᓕ ᓴᖅᑭᐅᓂᔨᓄᓇᖅᑎᑎᓂᖅᓂᖅᖢᖅᑐᑦ ᐊᒪᓕ ᓴᖅᑭᐅᓂᔨᓄᓇᖅᑎᑎᓂᖅᓂᖅᖢᖅᑐᑦ ᐃᓄᐃᑦ ᐃᓕᓐᓂᐊᓕ ᐃᓄᐃᑦ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐊᒪᓕ ᐱᖅᓯᓕᕐᓂᖅᓂᖅᖢᖅᑐᑦ ᐊᒪᓕ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐃᓄᐃᑦ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐊᒪᓕ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐃᓄᐃᑦ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐃᓄᐃᑦ ᐃᓕᓐᓂᐊᓕᓕᖅᑐᑦ ᐊᒪᓕ

Naitumik Ukautait

Ukiuktaktumi Kanatami amigaitukaktuk pitkutikhanik. Ukhukyuanit ovalo Kaasiliinut, Kipliktunit ovalo havikhanik, ukiuktaktuk tikitipkailiktuk kinikhiayunik pitkutikhanik unguvaktiyaagani. Hanatiligiyit pipkailaaktuugaluak kinauyaliugutikhanik, havagutikhanik ovalo pilaaktainik Inuit hanatiligiyimini inminiigutikalaalutik hanatiligiyit pilaakatagutiliit amigaitunik nakuungitunik ikpinagutigutilaat inuligiyiit ikpinainut ovalo nutkaktitilaaluni nunani inuutjutikhainik.

Inuit inuuviviniit ovalo inukatigit nutkagangitut. Inuit kinikhiayut pilaaktainik angilitinahuakhugit hanatiligiyikhainik ovalo inminiigutikhainik, ilaukatigiyaagani inuuviviniit atukpaktainik, ilangit; umayukhiugutait ovalo ikalukhiugutait. Piyumayut hanalutik kinauyaliulaagutikhainik hanatiligiyikhaminut, kihimi piyukhaungitut akigaktugumik inuuviviniit hanatiligiyinganut.

Ubluminut, hanatiligiyit keelinigutikaktut ukiuktaktumi. Kihimi, nani hanatiligiyikaktut ikpinagutikaktut anigagutinik ovalo naamagutikhainik Inuit ovalo nunait. Pikamat, nutaanik inuligiyit, inuuviviniit ovalo hilakyualigiyit ukiuktaktumi, Inuit ilaa, aninagutikalaaktut amigaitunut aalanguliktunut hanagiligiyit pipkailaagutainik:

- Pitkutikhat hanatiligiyiit naitumik havakviulikpaktut, pipkaivlutik taivaktut “havakpialiktut ovalo Nutkaktitiyut” hanatiligiyiminik. Ukiuktaktumi, ikitut hanatiligiyikhat pilaaktut pikaktut, ikpinagutait nutkaktitiyut ikpinagutigilaat angiyumik, pipkailutik amigaitunik kagitanut aniagutigilaanik ovalo hilakyuami ahiguktititiklutik nutkaktilaaluni tikivigilaat umayukhiukviit.
- Inuuviviniit hanatiligiyiit angitkiyauyut hanatiligiyit, aniaktailigiyit ovalo inuuviviniit ikpinagutikakhutik ukiuktaktumi, kihimi nunakakaakhimayut nalungitait hanatiligiyinik hilakyuami takupkaihimayut pitkutainik nutkaktitilikhutik inuuviviniit umayukhiugutainut havakpaktainik (Katimakyuaktut Katimayiit Kanatami, makpigaami 8, Duhaimme 2005). Uyagakhiuktut ovlao ukhukayuat ovalo kaasiliit hanatiligiyingit pipkailaaktut akhut hilakyuami ahiguktititikluni ovalo

nutkaktititikluni hilakyuamik, pipkailaaktut ayokhagutikhainik Inuit ikalukhiugutainik, umayukhiugutainik ovalo nanigiakhiugutainik. Pitkutihimayait mikhitiklugit umayukhiugutait ilauyut; inminik aniagutikhainik ikpinakgutait, aumayugutit aniagutit, puvalaligutinik, aumini aniagutinik ovalo puvaminik aniagutit ovalo kagitauminut aniagutit ikpinagutiliit, ilauyut ningagutit, aangiyaagutinik atuinagutit ovalo inminiigutit. Inuk pilaitkumi havagutikhainik hanatiligiyit hanayakhaini, nuutitilaat angiyumik kagitainut aniagutainut ikpinagutainik, ihumagiyautjutikaluni ilaukatungitut ovaluniit ilaa, "ilaungitut", (Obed 2006).

- Inuit nunait inuuvivinimiminut aatjikutikainaktut. Ilaa, pitkutikhat unguvaktiktukhat hanatiligiyiit angiyuuyut ovalo atukpaktut amigaitunik naitumik havaktut nigiaganit. Hamna nutkaktitigutit nunani ilanginut ilaupkaiyut amigaitunik ayokhagutinik, ilauyut kagitanut aniagutit, tukutitiyut, amigaliktut aniagutit kuyanigaagamik, hingaihimayut aniaktukaktunik, havakvini mikhaanut anigutit ovalo anianginagutit; ayokhaklutik ihivgiugiagani ovalo ayokhaktitailugit nutakakakviit ovalo nigainagutinik.
- Pikaktut angiyunik kitkaniitunik kinauyaliuktainik Inuit ovalo havaktut nigiaganit. Hamna aatjikiingigutit kinauyaliugutini pipkaivaktuk ikpinagutainik Inunut ovalo nunani aniagutikhainik ovalo nakuutjutikhainik, pipkaivluni kagitaunut aniagutit ovalo ayokhagutait ihumaalugutainik, ilangit; higaalikapaktut, ningalikpaktut ovalo aangiyaagutinik atulikpaktut.
- Hanatiligiyit kaipkalikpaktutlu amigailiktunik aangiyaagutinik atugutainik ovalo akigaktuiliktunik mikhaanut.
- Ilaa, ihumaalunaktuk ikpinagutait anilaaktut ilaukatauyunut, ilangit; aknait ovalo nutakait.
- Hanatiligiyit ayokhaktitiniaktait pihimayut pikatiangitut havakatigitjutikhait ukiuktaktumi, ilangit; iklukhat, pipkaivlutik inminik ovalo kagitaminut aniagutit pipkaitjutainik. Pikaktutlu aalangutigutainik akiit niuviktainik ovalo ikayugutikhait hanatiligiyit ubluni (Obed, 2006).

Hanatiligiyit pilaaktut aniagutikhainik Inuit nunaini. Kihimi, pilaaktut ikayuklugit Inuit ovalo Inuit inuuviviniit ovalo inukatigiit hivumungaktititiklugit. Hamna pilaaktuk kanuk ikpinaktut hanatiligiyini munagiyauniaktut ovalo paknaiyakhimayut ovalo kanuk akhuukpaktut ovalo

hakugiktut Inuit ovalo nunait pivaktut ilaugaagamik hanatiligiyinut. Pikaktuk amigaitunik hanatjutikhait ovalo atugutikhait Kanatami ovalo Hilakyuami pilaaktait Inuit, ilaukatigiyaagani Inuit tamaat angigutikhait atugutikhainik ovalo tamaat ilaukataugumik hanatiligiyini hanayakhainik. Hapkoa ilauyut Nunataagutit Angigutait ovalo ilangit hilakyuami angigutait.

Краткое изложение вопроса

Арктические районы Канады чрезвычайно богаты природными ресурсами. Благодаря нефти и газу, алмазам и никелю Север стал аттрактивным регионом разработки недр и добычи полезных ископаемых. Хотя развитие приносит инуитам деньги, работу и возможность самостоятельно организовать экономическую жизнь, полагаясь на свои собственные силы, развитие потенциально является также причиной, порождающей немало негативных социальных последствий и подрывающей благополучие сообщества.

Культура и само общество инутов в целом не являются статичными. Инуитский народ ищет возможности обеспечения большей автономии и автаркии, сохранив при этом традиционные промыслы, такие как охота и рыболовство. Налицо стремление развивать экономику, построенную на наемном труде, однако это не должно произойти в ущерб традиционной экономике.

До настоящего времени в районах проживания инутов развитие осуществлялось лишь в ограниченных объемах. Причем, там, где происходило развитие, наблюдалось негативное воздействие на здоровье и благополучие как отдельных представителей сообщества, так и всего сообщества в целом. В силу уникальных социальных и культурных условий жизни, а также учитывая особенности окружающей среды, инуиты оказываются исключительно уязвимыми перед лицом тех многочисленных изменений, которые потенциально несет с собой процесс развития.

- Развитие с опорой на природные ресурсы, как правило, является кратковременным явлением и приводит к тому, что широко известно как «экономический бум», для которого характерны резкие подъемы и спады в экономической жизни. В районах проживания инутов, которые не отличаются большим разнообразием экономических альтернатив, эффект резкого спада может оказаться особенно ощутимым, привести к многочисленным

последствиям для психического здоровья, причинить ущерб окружающей среде, что в свою очередь может сказаться на местных традиционных способах добычи пищи инуитов.

- Традиционный уклад жизни имеет большое экономическое и культурное значение в районах проживания инутов, но в то же время, опыт коренных народов в области развития в мире показывает, что развитие нередко приводит к упадку в традиционных продуктивных сферах деятельности (Совет Конференции Канады, стр. 8, Duhaimme, 2005 г.). Развитие горнодобывающей, нефтяной и газовой промышленности потенциально несет в себе угрозу нанесения серьезного ущерба окружающей среде, разрыва устоявшихся связей с природой, что может создать трудности для инуитсткого народа в таких традиционных промыслах, как рыболовство и охота, в частности с применением самоловных орудий. Среди последствий упадка в традиционных продуктивных сферах деятельности следует назвать отрицательное воздействие на физическое здоровье в виде диабета, ожирения, гипертонии и других сердечно-сосудистых заболеваний, а также негативное влияние на психическое здоровье, выражающееся в актах насилия, токсикомании и самоубийствах. Кроме того, если человеку не удается найти работу в рамках проекта развития, это также может привести к серьезным последствиям для психического здоровья, например, к появлению чувства маргинализации или просто «никчемности» (Obed, 2006 г.).
- Инуитские сообщества характеризуются, как правило, однородностью культурных традиций. Обычно, разработка залежей полезных ископаемых проводится в широких масштабах и требует временной рабочей силы в значительных объемах, приток которой происходит из районов страны, расположенных южнее. Разрыв с традиционной динамикой сообщества влечет за собой целый ряд последствий, включая ухудшение психического здоровья, увеличение числа убийств, рост случаев инфекционных заболеваний, передающихся половым путем, спектрально установленные нарушения в результате фетального алкогольного синдрома, производственный травматизм, нетрудоспособность, проблемы, связанные с приступами депрессии и

постоянным стрессом, что мешает обеспечить нормальный уход за детьми, и наконец, акты насилия.

- Очень часто наблюдается существенный разрыв между зарплатой инуитов и зарплатой работников, приезжающих из других регионов. Такое неравенство в доходах несет в себе потенциальную угрозу здоровью и благополучию как всего сообщества в целом, так и отдельных его членов, что находит свое выражение в последствиях для психического здоровья, в поведении, обусловленном стрессовой нагрузкой, включая курение, насилие и токсикоманию.
- Развитие несет с собой также увеличение случаев токсикомании и преступности.
- Особую озабоченность в этом отношении вызывает воздействие на наиболее уязвимые группы населения, включая женщин и детей.
- Развитие усиливает стресс в связи с уже ставшей неадекватной инфраструктурой в инуитских сообществах, в частности, что касается жилья, и это также находит отражение в последствиях для физического и психического здоровья. И наконец, следует отметить повышение стоимости товаров и услуг в период развития (Obed, 2006 г.).

Развитие потенциально может явиться генератором нездоровых явлений в инуитских сообществах. Но в то же время, развитие может способствовать процветанию инуитского народа, его культуры, его общества. Это зависит от того, как осуществляется управление последствиями развития, какая подготовка этому предшествует и насколько гибкими и сильными являются сообщества в индивидуальном и коллективном плане при столкновении с процессом развития. На национальном и международном уровнях существует немало инструментов и механизмов, используемых в целях самого широкого вовлечения инуитского народа в процесс принятия решений в качестве полноценного участника проектов развития. Сюда относятся, в частности, соглашения о земельных требованиях и определенные международные договоры.

Summary

The Arctic regions of Canada are rich with natural resources. From oil and gas to diamonds and nickel, the North is becoming an attractive destination for resource extraction development. Although development brings money, work, and the potential for Inuit to become more economically self-reliant, development also has the potential to cause many negative social impacts and disruptions to community well-being.

Inuit culture and society are not static. Inuit are looking for opportunities for greater autonomy and self-sufficiency to accompany traditional practices such as hunting and fishing. There is a desire to develop a wage-earner economy, however, it must not come at the expense of the traditional economy.

To date, development has been limited in the Inuit regions. However, where there has been development, there have been impacts on the health and well-being of individuals and communities. Due to their unique social, cultural, and environmental situation, Inuit are especially vulnerable to many of the changes that development has the potential to cause.

- Resource-based development is typically short-term, resulting in what is widely known as 'boom and bust' economies. In Inuit regions, where few economic alternatives exist, the effect of the bust can be especially severe, resulting in a number of mental health consequences and environmental damage leading to diminished access to country foods.
- The traditional economy is of great economic and cultural importance in Inuit regions, however, indigenous peoples' experience with development worldwide has demonstrated that development often results in a decrease in traditional harvesting activities (Conference Board of Canada, p.8; Duhaimme, 2005). Mining and oil and gas development have the potential to cause serious environmental damage and disruption to the natural environment that may result in difficulties for Inuit to fish,

hunt and trap. The consequences of a decrease in harvesting activities include physical health impacts in the form of diabetes, obesity, high blood pressure and heart disease, as well as mental health impacts in the form of violence, substance abuse and suicide. In addition, if an individual is unable to obtain employment with the development project, it can lead to serious mental health impacts, such as feelings of marginalization or simply "not belonging" (Obed, 2006).

- Inuit communities are generally culturally homogenous. Typically resource extraction development is large-scale and requires a large, transient workforce imported from the south. This disruption to community dynamics has been linked to a number of consequences including: mental health impacts; homicide; increased incidents of sexually transmitted infections; fetal alcohol spectrum disorder; industry-related injuries and disabilities; difficulties in accessing and putting stresses on available childcare; and, violence.
- There is often a large gap in the wage Inuit earn and the wage earned by outsiders. This inequality in income has the potential to affect individual and community health and well-being, manifesting in mental health consequences and stress-induced behaviours such as smoking, violence and substance abuse.
- Development also brings an increase in substance abuse and crime.
- Of particular concern are impacts on vulnerable groups, including women and children.
- Development puts stress on the already inadequate infrastructure in Inuit communities, including housing, resulting in physical and mental health consequences. There are also increases to the costs of goods and services during a period of development (Obed, 2006).

Development does have the capacity to cause ill effects in Inuit communities. It does, however, also have the capacity to help Inuit and Inuit culture and society thrive. This depends on how the impacts of development are managed and prepared for, and how resilient and strong individuals and communities are when they face development. There are a significant number of tools and mechanisms at the national and international levels available to Inuit to ensure Inuit are fully engaged in decision-making processes and are full

participants in development projects. These include land claim agreements and certain international treaties.

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Introduction

The northern regions of Canada are characterized by a small population, low population density and geographic remoteness. These factors have resulted in the region being virtually undeveloped for economic purposes. This, however, is changing. The Arctic is a storehouse of natural resources, including minerals and fossil fuels, and as demand for these resources continues to grow, the North is becoming an attractive destination for development.

In the three decades since the Berger Inquiry called for a 10-year moratorium on oil and gas development in the Northwest Territories (NWT) much has changed. Thomas Berger had claimed that in order for Aboriginal Peoples to be full participants in the development of the fossil fuel reserves in the NWT, time was needed to settle land claims and build Aboriginal capacity to participate in and benefit from the development (Berger, 1988, p. 29). Land claims have been settled. Although educational attainment among Inuit remains well below the Canadian average, Inuit are becoming educated by southern standards at rates never seen before.

However, the settling of land claims and greater education levels are not guarantees that a community will benefit from resource extraction development. This paper looks at development in Inuit regions to identify some of the unique potential social and cultural impacts of large-scale resource extraction development by examining the literature on economic development in Inuit and other indigenous communities in Canada and around the world. It is also informed by interviews with a range of key informants and stakeholders in the northern regions of Canada. It concludes with a discussion on some of the tools available to Inuit to help ensure disruptions caused by development can be minimized. It is hoped that this information will assist Inuit, policy makers and others nationally and internationally to make positive, proactive decisions about present and future developments in and around Inuit communities.

Much of the international literature presents indigenous peoples' experience with development as predominantly negative. This is not without reason; many large-scale development projects have had a profoundly negative affect on indigenous people. According to *Mining and Indigenous Peoples Issues Review*, in terms of overall cost benefit analysis indigenous peoples (internationally) have rarely pulled net benefits out of large-scale mining operations (International Union for the Conservation of Nature and Natural Resources, 2003, p. 8).

At the Third Session of the United Nations Permanent Forum on Indigenous Issues in 2004, the representative from the Inuit Circumpolar Conference (ICC) stated, "Development projects could either help indigenous peoples survive, or destroy them and their cultural heritage, depending on how they are managed." The ICC representative also noted that so far, development projects have failed to consider indigenous priorities (United Nations, 2004). On industrial development in the North prior to the oil and gas exploration in the 1970s, Berger stated, "That experience has brought two things: first, that native people have not participated in the industrial economy on a permanent basis; and secondly, that the native people have paid a high price in terms of social impact whenever the industrial economy has penetrated into the North." (Berger, 1988, p. 197.)

This is not to say that all development is negative, and that Inuit do not want to participate. It is simplistic, and in most cases wrong, to believe that what Inuit want is to maintain or return to a solely land-based subsistence economy. In many cases it is impossible. According to the Conference Board of Canada's *Examination of the Nunavut Economy*, northern population growth had previously been limited to the capacity of the local environment to sustain it. Furthermore, social and cultural pressures limited individual consumption of available resources. These control mechanisms are no longer relevant. Food is shipped north, allowing growth of the population at a rate that would have been impossible in previous generations. Inuit are also consumers of media. Modern communications have helped to develop a consumer culture among Inuit (Conference Board of Canada, 2001, p. 10). As anyone who

has travelled in the North can attest, many Inuit youth are as sophisticated, technologically savvy, and consumerist as southern Canadian youths.

In Inuit regions there also exists a general desire for greater autonomy and self-sufficiency. Inuit are looking for development in their region to provide jobs, money, and independence. However, "…in Nunavut today the consensus is that economic growth is highly desirable so long as both the socio-economic and the environmental risks can be managed and minimized to an acceptable degree." (Hicks 1997, p. 18). As the representative from ICC stated at the Third Session of the United Nations Permanent Forum on Indigenous Issues (2004), development has the potential to benefit indigenous peoples. Development could increase employment opportunities and present opportunities for business development for Inuit directly and through spin-off industries. This is especially important in Inuit regions, as many communities have unemployment rates well over 50 per cent. In the long-term, development may improve access to health care, recreation and education opportunities as the population base increases (Canadian Public Health Association, 1997).

In *Northern Frontier, Northern Homeland*, Berger described the common concerns of northerners related to the construction of the Mackenzie Valley pipeline in the NWT. "The great majority of them expressed their fears of what the pipeline would bring: an influx of construction workers, more alcoholism, tearing of the social fabric, injury to the land, and the loss of identity as a people"(Berger, 1988, p. 25). Berger had hoped that the 10-year moratorium would enable Aboriginal Peoples to prepare for the eventual construction of the pipeline.

Many people in the NWT believe they are now in the same position they were in before Berger's recommendation. A recent report from the Conference Board of Canada found that "Boom's benefits flowing south", as was stated in a CBC North headline (CBC North, June 2003). The report says that Aboriginal Peoples in particular are missing out on the benefits of development, primarily because they are "hampered by a lack of basic life skills, literacy and numeracy problems, and low self-esteem" (CBC North, June 2003).

All too often, Aboriginal Peoples find their participation in economic activity in the North is limited. Control over development usually lies outside of the Arctic and typically the people working at the project come from the south (Duhaime, 2004, p. 71). In the NWT, the number of Aboriginal employees in the mines has historically ranged between nine and 12 per cent. Past experiences with development have shown that northerners typically find only short-term work as general labourers[1].

The lack of Inuit-specific data makes it difficult to quantify the social impacts of development in Inuit communities, and highlights the importance of further research in this area. Questions such as the effect on subsistence hunting and the resulting effect on nutrition and mental health and the effect on the transmission of cultural values to the next generation are very difficult to answer. There is little literature that looks at the impacts in an Inuit context, and mainstream literature does not address many of the areas of concern to Inuit such as impacts on hunting, fishing, trapping, and other cultural practices. In an assessment of the impacts of the Hibernia oil project in Newfoundland, the authors looked at four dimensions of quality of life: sociability, economic security, political efficacy, and personal security (Storey and Hamilton 2003, p. 293). These concepts are universal, so each of these dimensions is applicable to Inuit communities. But to assess the complete range of impacts one must also look at impacts on traditional activities (and the compounded impacts this has on mental health and nutrition), as well as the many impacts an influx of outsiders could have on a previously close-knit and culturally homogenous community.[2]

Although not a lot is known, experience has demonstrated that development projects have the capacity to cause ill effects, such as environmental damage and impacts on community well-being. Limited development in the northern regions in the past has meant that there has yet to be significant changes to either the people of the Arctic or the land they live on. There is, therefore, an opportunity to prevent some of the mistakes that have been made elsewhere.

[1] There are success stories with regard to levels of Inuit employment. The Labradorite mine in Labrador experiences high rates of Inuit employment, as does the Voisey's Bay nickel mine in Labrador.
[2] For a discussion on the impacts of development and assessment tools in a mainstream, Canadian context, see Health Canada, "*Canadian handbook on health impact assessment, Volumes 1 to 3.*"

Context

In order to understand what development means to Inuit, it is important to understand the people, the region, and the past and present economic situation of Inuit regions.

THE PEOPLE

In Canada there are approximately 46,000 Inuit living in four distinct regions (the Inuvialuit Settlement Region (northern Northwest Territories), Nunavut, Nunavik (northern Quebec), and Nunatsiavut (the north coast of Labrador)), as well as southern urban centres. The Inuit population is the youngest in Canada – 39 per cent are under the age of 14. The Inuit birth rate is twice as high as the Canadian rate (Statistics Canada, 2001). The fact that the population is so young has a major influence on the health and social needs, perceptions and capacity of Inuit when compared to other cultural groups in Canada.

Language differences have an impact on both the accessibility of information and access to education and training opportunities for Inuit. The high school graduation rate for Inuit is very low. More than 70 per cent of Inuit can carry on a conversation in Inuktitut (Statistics Canada, 2001); in the Eastern Arctic, Inuktitut is the language people read, speak, and use on a daily basis. Retention of the Inuktitut language is not as strong in Nunatsiavut or the Inuvialuit Settlement Region, but it continues to be a priority for Inuit leaders. In spite of immense pressure from the south, Inuit culture remains strong relative to other Aboriginal cultures in Canada.

HEALTH STATUS AND VULNERABILITY

On almost every health indicator, Inuit fare worse than any other group in Canada. The average lifespan for Inuit women is 14 years less than the average for Canadian women. Tuberculosis rates among Inuit are 70 times greater than the Canadian rate. Inuit also have the highest rates of chlamydia in Canada, and suicide rates that are among the highest in the world (Canadian Institute of Health Information, 2004, p. 80, 86).

Key determinants of health for Inuit demonstrate that Inuit are especially vulnerable to changes in their community and environment:

- nutrient dense, healthy country foods, such as caribou, seal, fish, and whale typically make up a large part of the Inuit diet[3];
- housing issues, including sub-standard housing and overcrowding, are commonplace across the Arctic[4];
- alcohol and substance abuse present major problems for many Inuit communities;
- a lack of access to basic services, including health and education; and,
- mental health and suicide prevention remain high priority health and wellness issues in all Inuit regions.

Other factors point to the increased vulnerability of indigenous peoples, including Inuit, to development. The International Council on Mining and Metals, in *Mining and Indigenous Peoples Issues Review*, list a number of specific areas of concern that are continually raised by indigenous peoples with respect to development:

- lack of acceptance or integration of customary decision-making structures by state systems;
- lack of or diminished access to justice;
- lack of or diminished access to basic social services, including health and education; and,
- high levels of discrimination and prejudice from other sectors of society. (Render, 2005).

[3] It should be noted that although country food harvesting and consumption remains high in Inuit regions there are great differences in rates between regions. In Nunavik, 78 per cent of households report that at least half the meat and fish consumed in their household is country food whereas the rate in Nunatsiavut is 56 per cent. Furthermore, age plays a role in harvesting activities: 74 per cent of Inuit men aged 15 to 24 harvest country food whereas 90 per cent of Inuit men aged 45 to 54 harvest country food (Statistics Canada, Aboriginal Peoples Survey, 2001).

[4] In 2001, 68 per cent of Inuit in Nunavik lived in crowded conditions; 54 per cent of Inuit in Nunavut lived in crowded conditions; 35 per cent of Inuit in the Inuvialuit region lived in crowded conditions; and 28 per cent of Inuit in Nunatsiavut lived in crowded conditions. The Canadian average for crowded housing is approximately seven per cent (Inuit Tapiriit Kanatami, Backgrounder on Housing, 2004).

THE NORTHERN ECONOMY

Not surprisingly, it was economics that first turned the eyes of Europeans to the North. It was the search for the Northwest Passage, then later the whaling industry of the 19th and early 20th centuries that marked the beginning of a permanent European presence, and therefore colonization, in the northern regions of Canada. Up to the early 20th century missionaries, including the Moravians in Labrador, engaged in trade with Inuit in an effort to fund their work. This increased contact with outsiders brought a dependency on southern governments and institutions. With this presence also came the transition from a hunting society to a mixed hunting and wage earning one, especially from the 1950s on.

The Arctic economy is divided into three streams. First, the informal economy, characterized by subsistence trapping, hunting and fishing, crafts, and so on. Second is the formal economy, traditionally characterized by large-scale resource extraction industry. The third, government, is the largest segment of the northern economy and the largest employer (Conference Board of Canada, 2001, p. 51). Social assistance payments also play a role in the northern economy. There is very limited manufacturing in the North and the fishery, although highly developed in other parts of the circumpolar world, is relatively minimal in terms of economic output in northern Canada. Unemployment is a major concern in Inuit communities. In the 2001 Aboriginal Peoples Survey, 79 per cent of adult Inuit identified unemployment as a problem facing their community (Statistics Canada, Aboriginal Peoples Survey, 2001).

Formal economic development in the North is typically large-scale (often called mega-projects) and has historically focused on obtaining natural resources, often for processing elsewhere. This has included mineral extraction, oil and gas extraction, as well as small and medium scale fisheries and harvesting of furs and animals.

THE TRADITIONAL ECONOMY

The role of the traditional economy should not be underestimated. It is not only an important part of the northern economy, but also an integral part of the social, individual and collective well-being of many Inuit. Even when Inuit enter the wage economy, harvesting activities continue to be a source of food in the household and an expression of Inuit culture contributing to individual and community well-being.

In the late 1980s, 80 per cent of Aboriginal households in the NWT had at least one harvester bringing home on average the equivalent of $10,000 to $11,000 in country food and furs. Findings of the 2001 Aboriginal Peoples Survey show that across Inuit regions approximately seven out of 10 Inuit harvest country foods (Statistics Canada, Aboriginal Peoples Survey, 2001). The economic impact of this means many Inuit do not have to buy meat or other proteins for their families. The Conference Board of Canada estimates the total value of the land-based economy in Nunavut today is in the range of $40 to $60 million per year. Food-oriented economic activity alone in Nunavut is estimated at $30 million (Conference Board of Canada, 2001, p. 32). In spite of many barriers to accessing country foods[5], it still remains an important part of the northern economy.

THE HISTORY AND FUTURE OF NORTHERN DEVELOPMENT

The economic potential of the northern regions of Canada is astounding. There are nine trillion cubic feet of natural gas in the Western Arctic. There are 94 trillion cubic feet of natural gas under the Arctic islands of Nunavut – a full one-quarter of Canada's gas reserves, valued at approximately $1 trillion (Conference Board of Canada, 2001, p. 33). If this were to be developed, "the boost to Nunavut's economy would be enormous" (Northern News Services, 2004, p. B11).

Throughout the last 50 years, there has been tremendous interest in developing the vast fossil fuel reserves of the North, especially in the Western Arctic. Exploratory wells were drilled in

[5] For example, climate change and the increasing costs of hunting equipment and fuel are affecting Inuit access. Also, women who are single parents are often unable to harvest country foods.

the region as early as the 1950s, and sporadic exploration activities occurred until the oil crisis of the 1970s when many onshore and offshore wells were drilled. Large deposits were discovered (Government of the Northwest Territories Department of Resources, Wildlife and Economic Development, date unknown). At that time, massive development would have been undertaken if the Berger report had not called for a 10-year moratorium on the construction of a pipeline from the Mackenzie Delta to southern markets. With many land claims in the region settled, and with gas prices steadily rising since the late 1990s, there is renewed interest in harvesting the reserves of the Western Arctic and building a pipeline to bring northern natural gas to southern markets.

The late 1970s and 1980s saw the oil and gas industry drill 27 exploratory wells off the coast of Labrador, resulting in five significant discoveries of natural gas. At the time, the industry was looking for oil, not natural gas, and therefore development did not occur. However, with demand and prices for natural gas rising, investment and exploration is once again happening on the Labrador Shelf. Gas may begin flowing to markets within 10 years (Explorer, December 2004).

Between 1950 and 1997, six mines operated north of the tree line in the Northwest Territories[6]: the North Rankin Nickel Mine from 1957 to 1962; the Hope Bay silver mine from 1973 to 1975; the Nanisivik lead and zinc mine from 1976 to 2004/05[7]; the Polaris lead and zinc mine from 1981 to the present; the Cullaton Lake gold mine from 1981 to 1985; and, the Lupin Mine from 1982 to 1998. In Nunavik, the Asbestos Hill mine was in operation from 1972 to 1983. Presently, the massive Raglan mine is operating in Nunavik (Hicks, 1997). In Labrador, the Voisey's Bay Project is in operation, and is one of the largest nickel mines in the world.

[6] This includes the area that is now the Nunavut Territory.
[7] The Nanisivik mine, presently in the shut down phase of its operations, closed in 2005. According to Hicks, the proximity of the mine to the community has been overwhelmingly positive for the community. "The community has benefited from employment, improved medical care, dock facilities and air transportation, with few negative impacts." (Hicks, J. *Mining in the Central Arctic: Experiences relevant to potential developments in Greenland,* 1997.) Residents of Arctic Bay are now concerned about the mine's closure and its potential impacts on health, infrastructure such as recreation facilities, the airport and docking facilities. (CBC North, Mine concerns prompt meeting with premier, January 31, 2005).

More than 1,000 permits have been issued to companies to explore for minerals on more than 150 million acres of land in Nunavut in 2005 (CBC North, February 4, 2005). On January 27, 2005, CBC North reported that Nunavut's first diamond mine had been "given the green light for construction." Approximately 60 jobs will be created during the construction phase, and another 116 jobs during the first phase of operations (CBC North, January 27, 2005).

The Labrador Inuit Development Corporation has experienced great success in the development of a Labradorite mining industry. Torngait Ujaganniavingit Corporation (TUC) began stone production in 1994 at the Ten Mile Bay quarry, near Nain. TUC has annual revenues of more than $2.3 million (Atlantic Canada Opportunities Agency, 2003).

Given the wealth of resources in the Canadian North and the growing international demand for these resources, development is sure to increase at unprecedented rates. The number of jobs that could be created as a result of harvesting these resources would far exceed the employable population of the Inuit regions. Furthermore, mining and oil and gas activities generate an enormous number of spin-off jobs. It is estimated that the mining industry in the NWT alone presently generates approximately 2,000 indirect jobs, in addition to an estimated 1,100 direct jobs (Ray and Westman, 2001). Construction of the Mackenzie Valley pipeline is estimated to bring 275,000 direct and indirect jobs (CBC North, April 26, 2005). To facilitate the development of these projects, it will be necessary to bring large numbers of workers in from the south.

Unique Impacts

BOOM AND BUST ECONOMIES

Resource-based industries are tied to the global economy, and are therefore driven by international markets. These types of industries are often referred to as 'boom and bust' economies. The history of resource extraction in Inuit regions, and elsewhere, can in many cases be characterized as a rapid influx of money and work, a short period of economic boom, then a rapid bust with an exodus of the money and work.

The impact of the bust can be severe in Inuit regions, as these isolated communities have few economic alternatives and the traditional economy is often disrupted by the industrial development. "In some instances, the exploration/discovery phase disrupted traditional activities without creating durable opportunities to use new training, skills or investments after the boom was over." (Storey and Hamilton, 2004, p. 283). Furthermore, people may become accustomed to a certain standard of living. When the industry leaves the area they are left unable to carry on that standard of living and are vulnerable to the social disruptions and human costs.

CULTURE AND NUTRITION

It is through cultural practices such as hunting and fishing that Inuit have traditionally provided for their families. Duhaime found that one of the consequences of large-scale resource development in the North has been changes in the ways people use the land (2005). Typically, as development in a region increases, the contribution of the traditional subsistence land-based sector decreases (Conference Board of Canada, 2001, p. 8).

In *Balancing Economic Development Against Indigenous Values: nickel mining in coastal Labrador*, Inuit identified development as an attack on their traditional lifestyle (Heathcote,

date unknown). Traditional cultural activities are of prime importance to many Aboriginal people because they are their:

- principle source of pride, worth, distinctiveness and identity;
- basis for harvesting the benefits and meeting the challenges of surviving on the land they respect and love; and,
- primary defense against the prejudice and discrimination sometimes shown by those from other cultures (Mackenzie Valley Environmental Review Board 2004, p. 5.1)

Often, development projects close off certain areas to hunting, trapping and fishing, or disturb traditional migratory routes of species such as birds and caribou. Caribou are vulnerable to changes in access to their calving grounds. Compounded with existing environmental changes such as climate change, if the development takes place on or near calving grounds, it is very likely that the health of the caribou population would be affected negatively. Animals may move to new territories, leaving areas that may have been used for hunting by a particular family or community. These new territories may be on another family's traditional hunting lands, and therefore some individuals may have to travel further to access country foods as they have been displaced from their traditional hunting territory (Obed, 2006). This may in turn have an impact on food availability in a community as some species become more difficult to harvest, on the levels of cultural activity in a community, and place psychological and economic stresses on families and community as a result of an inability to hunt.

In Alaska, since the pipeline was built the caribou have changed their migration route to a location too far for Inuit to access. Inuit have had to do without caribou, an ancient staple of their diet (Hopson, 1976). In Labrador, to compensate for the diminished access to country foods some families have experienced as a result of the Voisey's Bay nickel mine, a harvesting compensation program, administered by the Nunatsiavut Government, has been implemented to aid community people whose access to the land for economic and nutritional benefit has been affected by development (Obed, 2006).

When Inuit are employed at development projects, conflicts between work schedules and subsistence schedules often arise. A 1980 study of Inuit workers at the Nanisivik mine by Charles Hobart showed that extended periods of work at the mine resulted in some families of mine workers experiencing shortages of country foods. Thirty-five per cent of workers and 45 per cent of their wives reported that their families had less caribou to eat during the period that the husband was employed. Forty-eight per cent of workers said they harvested fewer seals while employed than they would have otherwise. Hobart states "the interference of mine employment with hunting is a matter of great significance to Inuit." (Hobart, 1982, p. 71).

Limited access to country foods leads to a greater reliance on store-bought foods. The health impacts of this transition have been well-documented in the international literature. For Inuit, this means a transition from healthy, nutrient-dense wild foods to modern, refined foods. Kuhnlein et al (1991) found that in the Western Arctic, on days where individuals consumed no country foods, their diets were significantly higher in carbohydrates, fat and sucrose. Kuhnlein also identified a number of health problems associated with the changing diet of Inuit, including diabetes, cancer, heart disease, obesity, and dental caries. She also identified a decrease in fitness levels and cold tolerance among Inuit who consumed a westernized diet. As the opportunity to hunt decreases, so does the amount of exercise the individual gets, further exacerbating the effects of nutrition change. Physical activity is integral to the activity of hunting.

In Labrador, Inuit found that one of the impacts of development was that the mining industry lured many people away from the community for employment[8]. Some of these people who left the community were Inuktitut teachers (Wolfrey, 2005). Retention of Inuktitut in Labrador is low, and therefore for the survival of the language, it is very important for communities to have residents who can teach and pass on Inuktitut. Language retention is very important for Inuit, and for Inuit well-being. Language symbolizes the cultural group an individual belongs to and shapes the way they look at the world (NWT Literacy Council,

[8] In the 2001 Aboriginal Peoples Survey, 46 per cent of Inuit men and 30 per cent of Inuit women identified employment considerations as the main reason they would consider leaving their community.

2002, p. 6). It is also used to transmit culture and "traditional" or indigenous knowledge from one generation to the next:

> *"A language long associated with the culture is best able to express most easily, most exactly, most richly, with more appropriate overtones, the concerns, artifacts, values, and interests of that culture"(Fishman, 1996).*

When a language is lost, one loses "those things that essentially are the way of life, the way of thought, the way of valuing, and the human reality that you are talking about" (Fishman, 1996). Loss of language disassociates an individual from his/her kinship, and his/her history. An individual or a group loses its cohesiveness if their defining language is lost; they in essence lose their identity. "Without the continuance of language, a people's culture, heritage, and overall health is irrevocably compromised" (National Aboriginal Health Organization, 2004).

MENTAL HEALTH

A decrease in the amount of time spent on cultural activities like hunting and fishing may result in a negative impact on identity and self-esteem. The ability to provide for one's family is central to the emotional and mental well-being of an individual, as well as their sense of identity and self-esteem. This loss of identity is what Berger called the most pervasive social problem in the North, manifesting in violence, substance abuse and suicide.

In *The Circumpolar Inuit: health of a population in transition*, Young and Bjerregaard assert, "in populations undergoing cultural change, health becomes affected when there is a discrepancy between modern and traditional values" (1998, p. 175). Certainly, the discrepancy between the desire or necessity to hunt to provide for one's family and the demands of a scheduled work environment or inability to hunt as a result of a changed landscape is a factor in the well-being of Inuit. Young and Bjerregaard make a connection between the transition from hunter to wage earner and the high suicide rate among Inuit men:

"The transition from hunter and sole bread winner (sic) to wage earner in a subordinate position or even unemployed was difficult for the men." (1998, p. 183).

Inuit men, in fact, are at a great risk of being excluded from development in the North. A recent study in Alaska found that nearly three times as many indigenous women earn degrees than men (Nunatsiaq News, October 7, 2005). The Ajunnginiq Centre publication *What Sculpture is to Soapstone, Education is to the Soul: Building the capacity of Inuit in the health field,* found that Inuit men seem to be falling through the cracks with regard to education:

> The majority of post-secondary students are women, as are high school students planning to continue their education. The imbalance is quite startling, with two to three times as many women in most programs (Ajunnginiq Centre, 2004).

COMMUNITY DYNAMICS

Development projects typically require a large number of highly skilled workers. Given the small population and lack of skilled workers in Inuit communities, development projects will often mean an influx of a largely imported, temporary workforce and their families. The Mackenzie Valley natural gas pipeline project is anticipated to bring 275,000 direct and indirect jobs to the NWT (CBC North, April 26, 2005). The population of the NWT in 2001 was 37,105 (Statistics Canada, 2001). In Alaska, over a 10-year period that saw the construction of a pipeline, the state's population grew by 25 per cent (CBC North, April 26, 2005).

A large number of 'outsiders' from the south will disrupt the dynamics of close-knit Arctic communities, upsetting the socio-cultural and economic equilibrium that has developed over centuries. Inuit express a high degree of social support in their communities – 96 per cent of Inuit report the existence of a personal support network in their community (Young and Bjerrgaard, 1998, p. 178). Yet, it remains to be seen how the changing face of communities will affect this perceived community support. According to the *Canadian Handbook on*

Health Impact Assessment, changes in a community can generate uncertainties within the community, leading to a loss of control over and deterioration of quality of life and health of the community (Health Canada, 1999).

Social change, like a massive population influx of 'outsiders', can have negative effects on a society. Rapid socio-cultural change can generate a change in a community's dynamic leading to the loss of cultural guidelines for behaviour, or what is sometimes referred to as *anomie*. This deterioration of a culturally-based society has been linked among the northwestern Aboriginal population in Canada to a high prevalence of alcoholism and youth suicide. This destabilization of community and cultural norms has been linked to a variety of other health consequences, including lowered mental health status, homicide and family violence (Young and Bjerrgaard, 1998, p. 229).

Markus J. Leineweber states that within the process of moving from a traditional lifestyle into a modern wage economy, social and public health problems such as alcoholism, violence and suicide emerge. This is due to a number of reasons. Rapid change occurs in not only the economic and demographic spheres, such as increased incomes and an influx of outsiders in a community, but in the social and cultural dimensions as well. Within a wage economy, day-to-day life problems are different than the day-to-day problems Inuit faced in a traditional society. It follows that the values and practices traditionally used by individuals to cope may become irrelevant, leaving the individual lost between two worlds without the tools needed to cope (Leineweber, 2000, p. 25).

INCOME INEQUALITY

Income is a widely accepted indicator of health status. However, research has demonstrated that actual household income is less important in assessing the health of a group of people than the size of the gap between the rich and poor in a given population (Wilkinson, 1992). Material conditions may not be as important to health status as the social meanings attached to those conditions.

In 1996 the average income for Inuit in Nunavik was $16,122; non-Inuit in the region earned, on average, $36,574 (Inuit Tapiriit Kanatami, Backgrounder on Inuit Health, 2004). Across the Inuit regions, higher paying jobs requiring higher skill levels are often held by non-Inuit. Berger argues in *Northern Frontier, Northern Homeland* that there are, in fact, two Norths. One is the white North of the 'haves'; the other is the Aboriginal North of the 'have nots' (Berger, 1988, p. 179).

Jobs in the resource industries are becoming increasingly complex, requiring high levels of education and training. Few Inuit currently have these skills. Nor is there necessarily the motivation to develop a career in these industries, as resource development is short-lived due to its boom and bust nature. The result is a transient workforce that is imported from the south, and who have no connection to the region or the people indigenous to the area. Disparities in the standard of living between employees of the industrial sector and the rest of the population exist, and are "often correlated with ethnicity" (Duhaime, 2004, p. 71). This inequity in income between the 'haves' and the 'have nots' affects individual health "through perceptions of place in the social hierarchy based on relative position according to income" (Lynch, 2005). This perception, and the negative emotions it generates, may result in unhealthy stress-induced behaviours such as smoking, violence and substance abuse (Wilkinson, 1992).

SUBSTANCE ABUSE

> We're a community of 300 people when this discovery was made…it was a big concern about the influence of alcohol, the influence of drugs, influence. Just outside sources going, getting into our youth (Channel 6 Denmark 2001, Episode 2, Scene 53).

Of key concern to many Aboriginal community members is the likelihood that with money comes drugs and alcohol. Police in Inuvik, NWT, are warning that the proposed pipeline may also bring drugs and organized crime. In February 2005, CBC North reported in the news story *Pipeline expected to bring gangs, drugs*, "During the last petroleum boom, in the

1970s, the drug business boomed too." (February 2, 2005). Also according to CBC North, community residents are fearful of the negative influence, such as drinking, on their communities from the temporary camps constructed to house the pipeline workers (March 17, 2004).

Crack cocaine use is increasing in Inuvik, and the Status of Women Council of the Northwest Territories attributes this to "the flow of southern workers coming into these communities" (Status of Women Council of the NWT, 2004). The Council also states that:

> It is the experience of northern women that short-term industrial employment income such as will be generated by the proposed Mackenzie Gas Project, tends to be treated by northern workers as disposable income or "*mad money*" that is spent on gambling, alcohol and drugs. These addictions contribute to promiscuity, violence, crime and the demise of human health and well-being (Status of Women Council of the NWT, 2004).

The consequences of chronic and widespread alcoholism in Inuit communities are well known. Bjerrgaard and Young state:

> Misuse of alcohol has many effects on health but in Inuit the most common are accidents and violence resulting in cuts, bruises, fractures, head injuries, etc. Drownings, falls, frostbite, burns and pneumonia are other results of intoxication and there is a direct association between alcohol misuse and suicides. In a longer perspective, drinking also leads to social problems in the home such as spouse and child abuse or family breakup, and to economic problems and loss of jobs due to instability at work. Finally, fetal alcohol syndrome is a serious condition of infants whose mothers have consumed large amounts of alcohol during pregnancy (1998, p. 158).

Berger argued that the presence of a huge migrant labour force and the impact of construction over the years would result in more drugs and alcohol in the North. Berger

related alcohol and drugs to suicide, mental illness, crimes of violence, and the exploitation of women (Berger, 1988, p. 206).

These concerns are echoed in the Communities and Diamonds Annual Report 2001: "Existing social problems in Aboriginal communities may be compounded by an increase in wages. Additional expendable income can lead to alcohol and drug abuse and intensify existing social problems such as violence" (Government of the Northwest Territories 2002, p. 9). However, this report goes on to say that, "A large industrial project such as the BHP Billiton Ekati Mine could act as a catalyst for improved self-esteem, a higher standard of living, improved education and skill levels, and a generally improved quality of life." (Government of the Northwest Territories, 2002, p. 9). This point is certainly debatable in Labrador. Tongamiut Inuit Annait's submission to the impact assessment for the Voisey's Bay Nickel Project states:

> …the Environmental Impact Statement (EIS) clearly points out that communities are experiencing a wide range of social problems – alcohol abuse, family violence, poor health status, high rates of STDs, high youth suicide rates. [Voisey's Bay Nickel Company] suggests that these problems will be addressed through a combination of higher incomes and the company's Employee Assistance Plan. An often used example is that increased income will make hunting more affordable…In contrast, women expressed concerns that the two-week in/two-week out work schedule will possibly lead to less hunting…Women also objected to the assumption that full-time work is, in itself, positive. Given people's seasonal land and sea-based activities, full-time work may seriously disrupt the lifestyle and economies of families and communities. These disruptions must carefully be weighted against the benefits of an increase in income, especially when it means losing a family member to the mine for two weeks out of every four (1998, p. 8).

CRIME

> Changes here have been dramatic in Alaska, not just here on the North Slope, but throughout the state. After the oil development, everyone started locking their doors. Prior to that it just didn't seem like much of a problem; very few people throughout the state even bothered with door locks (Channel 6 Denmark 2002, Episode 4, Scene 54).

Crime, especially violent crime, is a key concern for Inuit communities facing development. The period from 1969 to 1975 was a period of great industrial expansion in the Northwest Territories. It was also a period of great increase in the crime rate in that region (Berger 1988, p. 203). Given this fact, Berger posited that, "An increase in industrial wage employment and disposable income among the native people of the North brings with it a dramatic increase in violent death and injury." And, "the more the industrial frontier replaces the homeland in the North, the worse the incidence of crime and violence will be" (Berger, 1988, p. 203). It is important to note that violent crime, although on the decrease nationwide, is increasing in many Inuit communities (Pauktuutit, 2005, p. 40).

HOUSING

During the massive oil and gas development in Alaska, large numbers of people migrated to the state in search of work. "Fairbanks was totally unprepared for the scale of the project, and the speed at which it took place. Public utilities and services were overwhelmed, the city's telephone service was overloaded, and the influx of workers created a hitherto unknown housing shortage" (Channel 6 Denmark 2002, Episode 4, Scene 12). The size of communities limits the services available to the residents, and a sudden growth in population may stress already limited services. New residents will demand medical care, schools and other amenities, as well as increase demand for already limited housing. Creating new housing is expensive and difficult due to the remoteness and high costs of labour and materials. The average house price in the Northwest Territories was almost $250,000, the second highest in

Canada in 2004 (CBC North, February 7, 2005). Residents of Inuvik, where there is an exceptional amount of development related to the oil and gas industry, have witnessed large increases in rent (CBC North, January 14, 2002). An increased population will stress an already weak system of public services, including sewer and water services, and further contribute to the crisis of overcrowded housing in Inuit communities.

Overcrowded[9] and sub-standard housing is a major concern in Inuit regions. As of 2001, 68 per cent of Inuit in Nunavik lived in crowded conditions; 54 per cent of Inuit in Nunavut lived in crowded conditions; 35 per cent of Inuit in the Inuvialuit region lived in crowded conditions; and 28 per cent of Inuit in Labrador lived in crowded conditions. The Canadian average for crowded housing is approximately seven per cent (Inuit Tapiriit Kanatami, Backgrounder on Housing, 2004). An influx of workers into small isolated communities will put further stress on an already overwhelmed housing infrastructure.

Overcrowded and substandard housing has been linked to a variety of health and social concerns. Overcrowding leads to increased vulnerability to airborne infections and communicable diseases such as tuberculosis, shigellosis, infant respiratory illnesses such as respiratory distress syndrome, and bronchitis. Inuit already experience tuberculosis rates at 70 times the Canadian average; Inuit infants have the world's highest rate of death from respiratory illnesses. Between March 1995 and February 1996 the rate of infant admissions to the Baffin Regional Hospital for respiratory infections was 306 per 1,000 (Banerji et al, 2001). Overcrowding may also lead to increased stress and anxiety, compounding existing mental health issues in Inuit communities. It is well known that suicide rates among Inuit are among the highest in the world (in the eastern Canadian Arctic, rates are nine to 10 times the national average), and alcohol problems, violence and sexual abuse occur at exceptionally high rates. Substandard housing, including issues of dampness and mould, is linked to health problems such as asthma, allergies, and respiratory illnesses. Furthermore, inadequate and crowded housing have an impact on performance at school and work (Korhonen, 2004).

[9] Statistics Canada defines crowding as 1.0 or more people per room.

WOMEN

Certain populations are much more vulnerable to the impacts of development, including women and children. Aboriginal women, as the primary caregivers in communities, have the least to gain, and the most to lose as a result of development. Women, according to *52 per cent of the Population Deserve a Second Look*, 'bear the brunt of these impacts' (Tongamiut Inuit Annait Ad Hoc Committee on Aboriginal Women and Mining in Labrador, 1997). Women are more likely to be the victims of sexual exploitation, violence and sexually transmitted infections (STIs) in communities undergoing rapid economic growth.

There is a very high rate of sexual and physical assault against women in Inuit communities. In 1997, Health Canada reported that 75 to 90 per cent of women in some northern Aboriginal communities had been abused. The same report found that 40 per cent of children in those communities had been victims of abuse. The NWT experiences admissions to shelters at eight times the Canadian rate. Sexual assaults occur in the NWT at six times the national rate[10] (Health Canada, 1997). It is important to note that it is generally accepted that a great number of physical and sexual abuse incidents are not reported; these figures, although serious, do not reflect the true situation in Inuit communities.

Inuit-identified root causes of abuse and other social problems affecting Inuit included cultural dissonance, substance abuse and loss of Inuit culture and values, all of which have been shown to emerge or intensify as a result of development (Pauktuutit, 2005, p. 13). Youth prostitution is already believed to be a problem in Yellowknife, and is expected to worsen across the NWT as a result of the construction of the pipeline down the Mackenzie Valley (CBC North, September 1, 2004).

Without adequate childcare options in Inuit communities, women may be excluded from obtaining employment at development projects. It is widely acknowledged that access to quality childcare in Inuit communities is woefully inadequate, resulting in a barrier for women to seek employment or enter education programs. In Inuvik, there is no licensed

[10] These figures include the area that is now the Nunavut Territory.

daycare for infants (CBC North, February 11, 2003). If a woman who wishes to work in the formal economy is unable to access childcare, she is unlikely to be able to reap any of the direct financial benefits of development.

The effect of labour migration has on the spread of STIs is well documented[11]. This is of particular concern as rates of STIs among Inuit are very high. Women, in particular young women, are at greater risk of sexually transmitted infection than men and are disproportionately affected by chlamydia infection and other STIs. In Nunavut, the rate of chlamydia infections is 16 times the Canadian rate (Capital News Online, Oct. 17, 2003). Gonorrhea rates in the Northwest Territories have increased by 300 per cent since 1999, a public health catastrophe. During that time frame, the region most affected by STIs was the Dene region of Tli Cho, coincidentally the region most directly affected by diamond mining in the NWT (Status of Women Council of the NWT, 2004). Syphilis is present in higher rates in the northern regions than anywhere else in Canada (Capital News Online, Oct. 17, 2003). Although data on the actual rate of HIV/AIDS among Inuit is not known, high rates of STIs and a very high birth rate indicate the potential for rapid HIV/AIDS transmission in Inuit regions.

Long-term implications, in terms of both the human and economic costs of any increases in the rates of STIs, including HIV/AIDS could be catastrophic. Unfortunately, issues related to the lack of access to health services in the northern regions of Canada, including anonymous testing, mean that many infected Inuit do not get the treatment they need.

[11] See Hunt, C.W., "Migrant labor and sexually transmitted disease: AIDS in Africa" in the Journal of Health and Social Behaviour, 1989; 30:353–73.

Moving Forward – Minimizing the Negative Impacts of Development

> Native society is not static. The things native people have said to this inquiry should not be regarded as a lament for a lost way of life, but as a plea for an opportunity to shape their own future, out of their own past. They are not seeking to entrench the past, but to build on it (Berger, 1988, p. 22-23).

It is possible to achieve significant benefits from resource development while minimizing social costs. It is clear that finding a balance between ensuring the traditional way of life that is so important for individual and community well-being is maintained, and that Inuit have the opportunity for meaningful work in the wage-based economy.

Chandler and Lalonde studied the link between Aboriginal self-determination and youth suicide among First Nations in British Columbia. They argue that the presence or absence of six factors were predictors of youth suicide in British Columbia First Nations communities. Each of these factors is related to the degree to which a particular group has the authority to control their own future:

- the attainment of self-government;
- the pursuit of land claims;
- band control over education;
- band control over health services;
- the presence of cultural facilities; and,
- band control over police and fire services (Chandler and Lalonde, 1998).

The presence of outsiders, or indeed the real or perceived imposition of development on a community, can have dire consequences on the degree to which residents feel they have control over their own future.

For almost the past 20 years, the Harvard Project has tried to find the strategies in American Indian communities to reduce poverty. It has consistently found three keys to economic success in American Indian communities:

1. sovereignty – decision making power over internal affairs, resources, governance, development;
2. institutions of governance that match indigenous conceptions of authority; and,
3. capable governing institutions (Jorgensen and Taylor, 2000).

Clearly, self-determination plays a role in the success of development projects. Inuit control over development is key to minimizing the negative effects of mega-projects. All stakeholders need to be involved in a meaningful way at all levels of the decision-making processes. Increasingly, there are mechanisms available to Inuit to ensure just that.

It was economics that drew Europeans northward in the 18th and 19th centuries. It was also economics that provided the impetus for the Canadian government to negotiate land claim agreements with Inuit. Land claims are modern treaties and have provisions to ensure that development cannot proceed without Inuit involvement in the decision-making process. This has not always been so:

> In the past, governments in Yellowknife have negotiated with mining companies. Inuit have had little or no say in the process of development. We were treated as foreigners in our own land (Quassa, 1994).

The James Bay and Northern Quebec Agreement, signed in 1975, was negotiated as a result of pressure from the Quebec government resulting from its interest in pursuing hydroelectric developments around James Bay. The Inuvialuit Final Agreement (IFA) was signed in 1984, against a backdrop of the moratorium on oil and gas exploration in the Northwest Territories called for by Berger in the 1970s (Berger, 1988. p. 29). In fact, one of the three principle goals of the IFA is “to enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society” (Government of Canada, 1984). The Nunavut

Land Claims Agreement, signed in 1993, partially has its roots in the potential development of mineral resources in what is now the territory of Nunavut. And, the recently ratified Labrador Inuit Land Claims Agreement also includes substantial economic measures, including an entire chapter on the Voisey's Bay mining project (Inuit Tapiriit Kanatami, Backgrounder on Economic Opportunities, 2004, p. 2; Obed, 2006).

Each of these land claims set out Inuit rights of ownership of and access to lands and resources within land claim settlement areas. The land claims also include "provisions for land use planning, the co-ordination of economic development programs and policies, and for the type of Impact Benefit Agreements that would need to be entered into in relation to the approval of resource development projects" (Inuit Tapiriit Kanatami, Backgrounder on Economic Opportunities, 2004, p. 3).

Land claims, and the power and authority that go along with them, are integral to ensure individual and community well-being during development. Economic Measures are tools included in land claims that assist in the achievement of the goals and objectives of the land claim. One of these tools is the impact and benefit agreement (IBA). IBAs are intended to ensure the participation of the beneficiaries of the land claim in development through training and employment opportunities, revenue sharing, environmental provisions, reclamation procedures, cross-cultural training, financial compensation[12] and dispute resolution (Canadian Arctic Resources Committee, 1998; Obed, 2006). IBAs have often been somewhat successful in minimizing impacts and improving Aboriginal employment rates. At the Aboriginal Peoples' Impact and Benefit Agreement Workshop held in Yellowknife in 1998, three basic principles for successful negotiation and implementation were identified:

- the Aboriginal community must be united by a common purpose;
- both parties must want to commit to a meaningful agreement; and,
- mutual respect, dignity and trust characterize a good relationship (Canadian Arctic Resources Committee, 1998).

[12] As part of the Impact and Benefit Agreement between LIA and the Voisey's Bay Nickel Project, Inuit in Nunatsiavut received both general compensation for use of lands and compensation for the impact the project has on harvesting activities.

Land claims also provide for the establishment of co-management boards for lands and resources. This is particularly valuable for Inuit facing resource extraction development, as these boards are the decision-making authority for land and resource use and management in Inuit regions. They are typically comprised of federal, provincial/territorial, and Inuit representatives, and afford Inuit some power to decide on matters that affect their lands and people. Co-management boards were initially developed as an innovative solution to conflicts arising over resource developments on Aboriginal lands. Although not a perfect solution, they do provide "a forum for learning to undertake collaborative resource management in a cross-cultural context, which, if used to its full potential, should lead to the development of new approaches to making decisions affecting the environment which better integrate the knowledge, values, and interests of Aboriginal groups with those of other Canadians" (Rusnak, 1997, p. 27).

Indigenous peoples worldwide have certain rights that guarantee ownership and access to land and resources, and that ensure indigenous participation in the decision-making processes with regard to resource development. These rights are outlined in a number of international agreements, many of which Canada is a signatory to, including: the Rio Declaration on Environment and Development; the Universal Declaration of Human Rights; the United Nations Draft Declaration on the Rights of Indigenous Peoples; the Organization of American States (OAS) Declaration on the Rights of Indigenous Peoples (draft); Agenda 21; and, the United Nations Convention on Biological Diversity (Whiteman and Mamen, 2005).

Whiteman and Mamen identified the indigenous rights included in these agreements (bracketed text indicates a treaty):

- recognition of indigenous identity and interests (Agenda 21, the Rio Declaration, the Convention on Biological Diversity);
- recognition of indigenous peoples' right to self-determination (UN Draft Declaration on the Rights of Indigenous Peoples, OAS Declaration on the Rights of Indigenous Peoples);
- recognition of indigenous land rights (UN Draft Declaration on the Rights of Indigenous Peoples);

- recognition of the role of indigenous people in sustainable development and environmental management (Agenda 21, Rio Declaration, UN Draft Declaration on the Rights of Indigenous Peoples, OAS Declaration on the Rights of Indigenous Peoples);
- recognition of indigenous peoples' rights to participate in resource management (Agenda 21, Rio Declaration, UN Draft Declaration on the Rights of Indigenous Peoples, OAS Declaration on the Rights of Indigenous Peoples);
- protection of indigenous peoples' knowledge, practices, and culture (Rio Declaration, Convention on Biological Diversity);
- recognition of the rights of indigenous peoples to participate in decisions that affect them (UN Draft Declaration on the Rights of Indigenous Peoples, OAS Declaration on the Rights of Indigenous Peoples);
- requirement that governments consult with indigenous peoples regarding mineral development (OAS Declaration on the Rights of Indigenous Peoples); and,
- indigenous peoples' rights to participation in and compensation for mineral development (UN Draft Declaration on the Rights of Indigenous Peoples, OAS Declaration on the Rights of Indigenous Peoples) (Whiteman and Mamen, 2005).

Article 8(j) of the Convention on Biological Diversity (CBD), in fact, calls for signatories to:

> "…respect, preserve, and maintain knowledge, innovations and practices of Indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations, and practices and encourage equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices" (United Nations Convention on Biological Diversity, Article 8(j)).

In order for Canada to live up to its obligations under land claim agreements and international agreements, development must not proceed in Inuit regions unless Inuit are involved in a meaningful way in the approval development projects. These projects must include an acceptable access and benefit sharing agreement based on prior informed consent.

Land claims, and the rights to ownership of and access to specified lands, ensures that development cannot occur on Inuit traditional lands without prior informed consent of and full participation from the people who inhabit those lands.

Furthermore, the *Akwé: Kon* Guidelines, based in part on Article 8(j) of the CBD, are intended to provide parties and governments with guidance to incorporate cultural, environmental and social considerations into impact assessment procedures. These voluntary guidelines call for the integration of cultural and social impact assessments in environmental impact assessments to development projects. As a result, an integrated environmental/ social/cultural assessment would address various dimensions of cultural and social well-being, including protection of sacred sites, changes to traditional land use, changes to traditional practices for food production, gender considerations, effects on social cohesion, among others. While voluntary and therefore not binding to states that are signatories to the *Convention*, they can also serve as a useful tool for indigenous peoples and communities when negotiating access and benefit sharing and other agreements related to resource development.

The federal government is assuming a necessary role in alleviating the negative impacts of oil and gas development in the Western Arctic. In July 2005, in an effort to jump start the Mackenzie Valley Pipeline, the federal government announced $500 million in social spending, to be divided among the Aboriginal regions along the pipeline route, including the Inuvialuit Settlement Region. Aboriginal groups will have substantial input into how the money will be spent (Northern New Services, July 20, 2005). The importance of the federal government's role in enforcing and implementing provincial/territorial, national and international, as well as land claim provisions related to social, cultural, and environmental impacts of development cannot be underestimated.

Conclusion

There is little question that Inuit will continue to experience development in the form of the resource extraction industry. Inuit have a lot to gain from participating in the modern wage economy, however, it is clear that along with these gains comes the potential for health and social impacts. One of the questions to be answered is how can the negative impacts of development be minimized.

Change is natural, and Inuit culture is not static. According to Fred Carmichael, chairperson of the Aboriginal Pipeline Group in the NWT, "We want it to be a future in which we are able to nourish our Aboriginal culture and our connection to the land while becoming increasingly self reliant and independent" (Carmichael, 2002). What matters most is individual and community capacity to adapt at their own pace to changes and their resilience to cope with the impacts. Industrial development can and does represent an opportunity for increased self-reliance, self-determination and a sustainable future if it is anticipated, prepared for and properly managed.

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