Resource Development and Well-being in Northern Canada

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The social dimensions of mining, oil and gas activity, hydro-electric development and related infrastructure have been conceptualized and studied in many different ways in the Canadian arctic, Alaska, Greenland, Scandinavia and Russia. This gap analysis will account for the diverse interdisciplinary literature on the benefits and dis-benefits of resource development for families, communities and regions. A core concept guiding the review is that of well-being. Similar to health, well-being is considered equally as an idealistic position or state of being (for individuals, families and communities) as well as a process (e.g. skills and capacities for living a good life). It is a useful concept for this literature review in that equivocal concepts can be found in many cultures and languages in the circumpolar north. Values, beliefs and social norms within communities affect the ways in which individuals perceive and respond to resource development projects as well as those broader exogenous influences of society, economy and governance which determine the range of benefits/dis-benefits. In addition to focusing on the suite of social “impacts” (e.g. demographic shifts, education, training, social pathologies) conventionally considered in assessment and monitoring, other socio-cultural dimensions of arctic resource development will be explored (e.g. research on cultural continuity/adaptation and dislocation, social inequality, family stress and anxiety). The intent is to highlight areas of greatest vulnerability including concepts, issues, approaches and areas of policy that warrant further study in further years of the RESDA project.

Key Concepts

The social dimensions of resource development are understood here through the lens of well-being. Although a concept used in academia and policy circles, it is also one that is synergistic with many indigenous peoples’ knowledge and belief systems. It speaks to the importance of balance between the emotional, mental, spiritual, and physical dimensions of the person as well as his/her connection to family, community and environment (King et al. 2009:76). It is often used interchangeably with concepts and measures of health, quality of life and life satisfaction. Translations of health and well-being such as “the Dene way of life” (Dene ch’anié) and miyupimaatisiu – being alive well in Cree - provide insight into different meanings (Parlee et al. 2007; Adelson 1998). In general, it is recognized that well-being, like the notion of health itself, is culturally constructed and has many different socio-economic, cultural and environmental dimensions and potential markers (indicators). Despite this cultural specificity, there have been efforts to objectively define and account for differences within and across many populations including northern Aboriginal populations in Canada and the circumpolar north.

Some statistics point to a significant gap in well-being between Aboriginal people and non-Aboriginal people in Canada. The First Nations Community Well-being Index suggests well-being among First Nations was markedly lower (2001) as measured by such indicators as education, labour force activity, income and housing. Based on 2001 data, nearly 50% of First Nations communities occupied the lower half of the index range (between 0.30 and 0.65) while
less than 3% of other Canadian communities fell within this range (Indian and Northern Affairs Canada 2004; Indian and Northern Affairs Canada 2010).

The gap is decreasing in some communities however, there is still wide discrepancy between conditions in First Nations and Inuit communities and other communities in Canada (INAC - Indian and Northern Affairs Canada 2010). It is in this context, that concerns have been raised about the role of resource development in arctic sustainability. More specifically, will resource development lead to improvements in well-being or compound that gap that already exists between Aboriginal people in the north and other populations in Canada?

**Resource Development Context**

Many communities are drawn to the promise of benefits from resource development. Although ‘development’ has alleviated some sources of environmental uncertainty for northern peoples, other environmental uncertainties are being created. Resource development including mining, oil and gas exploration, hydro-electric development as well as transportation networking is creating stresses for ecosystems and communities. The growth of mining, hydro-electric development and oil and gas exploration currently visible in the Canadian arctic and other parts of the circumpolar north have led to many significant changes over the last one hundred years. The legacy of abandoned mines, flooding and fragmented landscapes are synonymous with industrial activity in most areas of northern Canada, Alaska, Greenland, northern Russia and Scandinavia.

Single resource development projects may, on their own, have only limited impacts. However, the rapid pace and scale of resource development (including many small projects and some very large projects) are by some scholarly and local accounts, resulting in significant, adverse socio-economic and cultural effects (Duerden 2004; Nuttall et al. 2005; Wilson 2003). In addition, some arctic communities are also experiencing unprecedented climatic impacts including increased temperature, extreme weather events, reductions in the extent of ice cover, increases in precipitation, degree and extent of permafrost thaw, coastal erosion, seasonal and multi-year ice thaw (ACIA 2004).

In the past, few sustainable benefits seem to have been captured at the community or regional level. Although much has changed since the 1960s, concerns about the dis-benefits persist and may be compounded due to the acceleration of development activity that is predicted to occur in the coming decades. Some see the circumstances of Inuit, Dene and Métis of the Canadian north as similar to the experience of Greenland societies in the 1950s and 1960s; the rapid pace and scale of change in Greenland during this period is thought to have resulted in a loss or shift in traditional social norms and values (Hansen 1999). Unlike the Greenland experience, some scholars assert that the rapid pace and scale of change in Canada’s north may be outstripping the adaptive capacity of many northern communities who have become vulnerable to both socio-economic and environmental change (West 2011). However, these views may be overly pessimistic given the kinds of drastic social changes already experienced over the last one hundred years.
General Themes in the Study of Well-being and Resource Development

Historical Context

A large body of literature has focused on the history of northern Canada with a particular focus on federal government efforts to ‘develop’ the livelihoods, cultures and societies of northern peoples (RCAP 1998). Many such studies, rest on conclude that “development” has not really benefited northern people meaningfully or sustainably but instead has resulted in a legacy of underdevelopment similar to other colonized regions of the world. There is a widely held view that the well-being of communities was better prior to Euro-Canadian presence in the north. Similar to theory on “virgin soil epidemics”, which suggest problems of disease (e.g. small pox) only occurred after European settlement, some anthropologists and oral histories argue strongly that the social illnesses that are common in many communities (e.g., violence, addiction) did not exist until the last one hundred years or were better managed in the past through traditional systems of justice and governance (Ryan 1991). Colonial social policies aimed at assimilation and sedentarization altered many aspects of the way of life of northern peoples and led to a loss of self-reliance (Hicks 2010: 6). Examples include forced relocation of Inuit communities, criminalization of subsistence (e.g. caribou hunting), residential school practices and colonial measures of governance. Much research places the issue of natural resource development and its impacts on well-being within the historical context of each community and region. It is important to recognize, however, patterns in the experience of resource development across regions and elsewhere. Indigenous peoples in southern Canada, Australia, New Zealand and the United States with similar colonial histories face very similar contemporary issues of poverty, social illness and marginalization and often struggle with the same kinds of questions of social sustainability.

Education Systems - Knowledge and Well-being

A well-established social determinant of health and well-being is that of education. In northern Canada, education has many faces and is often dualistically conceptualized as formal versus informal - formal education is generally delivered by the state (governments) and the latter rests in the domain of the family and community. Statistics on formal educational attainment (e.g., high school graduation) are low in most parts of northern Canada leading to disadvantages vis a vis resource development. There are concerns that communities are “not ready” for the training and employment opportunities that rapidly occur with natural resource development projects such as the proposed Mackenzie Gas Project. One theory behind low education attainment is cultural dislocation or discontinuity – Aboriginal leaders and scholars see a significant disconnect between the traditional education systems of the past (informal) and that of the present. There are many efforts to build more holistic models of formal education and learning that reflect traditional ways of knowing, as well as skills for survival in a globalized arctic economy (Battiste 1998). Some key examples in the Northwest Territories include the Dene Kede. However, there are many critics of such efforts particularly in light of limited time, human resources and funding for basic curriculum (e.g. math). The sharing of Traditional Knowledge and skills is more often than not left up to the family, with the formal education system offering basic skills (e.g., reading, writing, arithmetic, and science) (Salokangas and Parlee 2009). But these two systems of learning remain incongruent even when delivered in different domains. A study in Tuktoyaktuk pointed out the obvious
contradictions: “If youth stay in school they spend less time on the land. If youth spend extended periods of time on the
land required to learn traditional knowledge and skills, they are unlikely to succeed in the formal school system” (Schlag 2004: 39). Opportunities for learning in both the formal education system and within the home are also very uneven within communities; diverse family histories often account for some children have many opportunities for learning and others having very few. Those families who do not value formal education tend not to see success in the formal education system. Similarly, those who do not value traditional knowledge and skills for living on the land do not pass on that knowledge and those skills to their children. Conversely, “if a family is strongly anchored in the political, traditional, and wage economies, it will envision more schooling and lucrative options for its young people…” (Salokangas and Parlee 2009: 202). Many of those who do become educated, however, leave their communities in search of broader opportunities elsewhere leading to rural-urban migration patterns similar to other parts of Canada. Increasingly, industry is playing an important role in the dynamics of education and training through the offer of adult education programs that are directly linked to employment opportunities. While many of these programs are equally or more successful than government initiatives, there are concerns that over-emphasis on resource development employment versus those jobs of value in communities or other sectors leading to a brain drain in communities. As demonstrated within the “resource curse” literature, it many also limit the resilience of individuals and communities to the boom-bust cycles of development.

Material Well-being

Some of the most oft discussed measures of well-being in northern Canada are material in nature and include basic infrastructure - housing, health care facilities, recreation facilities and schools. Although a basic point, it is the absence of such basic infrastructure which often leads to poor health and well-being outcomes (e.g. tuberculosis) that are non-dissimilar from the developing world. At the same time, evidence suggests that an increase in such infrastructure and material conditions leads to improvements in community well-being. Housing is a theme of critical importance as highlighted during previous research and discussion in workshops of Social-Economy Network of Northern Canada (SERNNoCA). The problem is seen as a growing crisis for two reasons. First, federal investment in housing which began in the 1960-70s created needs which did not previously exist. The declining condition of the housing projects constructed over twenty to thirty years ago, limited investment in housing maintenance and new homes, coupled with a growing population have created a gap between the number of houses available and the number of families in need. In Nunavut it is estimated that half of family homes are “overcrowded” with consequent statistics of social illness, particularly among children and youth becoming issues of national and international attention. Previous research on homelessness suggests housing insecurity is likely to be compounded by boom-bust cycles of resource development and uneven development across the territories with vulnerable populations (e.g. homeless, single mothers) facing the greatest dis-benefits.

Culture and Well-being

Alternative conceptualizations of well-being can highlight other kinds of issues and trends. A
theme better understood at the local scale is that of culture or cultural continuity. Cultural continuity and enculturation, for example, are increasingly recognized as protective of well-being as indicated by research on alcohol addiction and Aboriginal youth suicide (Chandler and Lalonde 1998; Kirmayer, Boothroyd et al. 1998; Currie, Wild et al. 2011). This idea that culture is “protective” is a departure from biomedical interpretations of well-being and health from the past which situated “culture” as the cause of poor health. Today culture is often seen and used uncritically as a cure-all. As noted by Waldram (2000); “the reification and reinvention of Aboriginal ‘culture’ as a treatment modality has been a fascinating process, and one in which an unconscious essentialist, and even primitivist agenda appears to have been at work, even where Aboriginal peoples themselves have been actively involved in the process” (Waldram 2000: 286). The shift from viewing culture as the problem and more to its view of as the solution is attributed to a variety of socio-political shifts as well as more pluralistic approaches to the study and treatment of illness. As a result, cultural content is now viewed as important in many aspects of health care and social programs, education and governance including those related to resource development.

A wide range of surveys on health and well-being from the Inuit Health Study to the Aboriginal Peoples Survey represent culture in some degree as a health determinant. This can range from the tracking of harvest practices, fluency in an Aboriginal language, or participation in ceremonies or cultural activities. While such efforts are aimed at highlighting the protective significance of culture against such social pathologies as trauma, drug and alcohol addiction and suicide (Chanlder and Lalonde 1998), the essentialization of culture into measureable bits or “things” are seen as overly simplistic (Brady 1995) and in some case part of a colonial and neo-colonial process of Aboriginal surveillance (O’Neil et al. 1998).

Cultural knowledge, norms, practices and beliefs, or Traditional Knowledge, may be equally protective of well-being. Traditional Ecological Knowledge (TK) is a cumulative body of knowledge developed over many generations (Berkes 2008). In many parts of the north, including Nunavut and settled land claim areas of the Northwest Territories, TK is to be considered equally with science in decision-making about lands and resources. Legislation such as the Traditional Knowledge Policy of the Government of the Northwest Territories is precedent setting in the opportunities it provides Aboriginal people to influence decisions of environmental assessment, land use planning and the management of forests, wildlife and fisheries. Such a policy has often translated into agreements and initiatives aimed at the documentation and use of TK in the management of resource development. In addition to contributing to the sustainability of projects and their effects on the environment, such initiatives have social benefits.

Another aspect of this theme is research on subjective well-being which can allow individuals and communities to use their own values, norms and feelings in rating or describing their situation. Subjective well-being has been correlated with many aspect of psychological conditions such as self-esteem, personal control, happiness, life satisfaction and positive outlook on life. It is also associated with self-efficacy as it pertains to goal setting and achievement. Diener and Suh (1997) determined that well-being is most likely to be experienced by those who are able to make progress towards or achieve personal goals. Such emphasis on Anglo-American and Judeo-Christian notions of the importance of individual productivity and functionality have led to criticisms and exploration of the meanings of well-being by medical and cultural anthropologists (Adelson 1998). Despite this growing body of phenomenological and
related qualitative study, scholars have concluded that well-being continues to be studied and measured within western frameworks which over-emphasize the importance of self and autonomy over social and social-ecological relations (Panelli 2009; Ingersoll-Dayton et al. 2004).

Social Relations and Social Economies

Income – or money - is critical aspect of well-being and often a key focus during socio-economic impact assessments of large scale resource development projects. Such projects are often seen as the magic bullet for addressing circumstances of poverty. It is assumed that as income increases, poverty will decrease with resulting improvements in well-being. This is not true across all income levels and may also not be the case in northern Canada where many other factors of culture, society and the land figure into peoples sense of a “good life”. Based on research in other countries. The relationship between well-being and growth in income are strongest at lower income levels (i.e. people whose income rises above the basic needs level are more likely to see steeper improvements in well-being than those at higher income levels). Significant improvements in health (e.g. life expectancy) have been made in the last 50 years in many countries but are not accompanied by similar improvements in well-being. “The proportion of people in developed societies who are happy or satisfied with their lives has remained stable over the past decades even though they have become, on average much richer” (Eckersley 2001: 77).

In North America, it is often stated that people are more interested in their relative income than the absolute income. In other words, we care more that we have more money than our neighbours than about the amount of money itself. In northern Canada, however, where incomes are low in comparison to the high costs of living, absolute income (making ends meet) likely has more significance.

Social circumstances including social networks, extent of social supports and feelings of belonging are strongly associated with well-being. Individualistic traits and lack of social connectedness are conversely associated with the absence of well-being (Eckersley 2008).

With that in mind, a key misconception of resource development policy in the north may be the need for full-time employment for all. Seasonal or flexible part-time employment may be the most desirable for many families (Abele 2009). Full-time employment has the potential to increase food insecurity as households have less time to procure country/traditional foods and become increasingly dependent on less nutritious and more costly food alternatives from the store (Todd 2010). Research on the household and mixed economy suggests traditional economies may be protective, in the context of boom-bust effects (Usher et al. 2003). As housing and food prices increase during a boom or wages to meet those needs disappear in an economic collapse, those who have skills and knowledge for living on land (e.g. procuring traditional/country food), are considered better off than those who are entirely dependent on the wage economy. Strong social networks and a strong social-economy may also mitigate some of community-wide effects that may result during a “bust” period of development.

Land and Well-being

While there are many factors that affect the well-being of northern communities, changes in the health of the environment is a significant focus of research in northern Canada. Early anthropologists tended to look for a single causal factor to explain social and cultural change with
the ‘sovereign influence of environment’ being of widespread interest to scholars as well as poets, writers and historians (Freilich 1967:26). Such notions of the health of the land being critical to health and well-being is mirrored in the oral histories and beliefs of Aboriginal peoples in the north and elsewhere. “If the land is not healthy, how can we be?” (Adelson 1998). The spiritual and cultural connections between people and arctic lands and resources have been a focus of academic investigation in almost every part of northern Canada and the circumpolar north. Such interest has often been translated into more economic analyses of the value of lands and resources. Calculations of harvest yields “harvest yields” are commonly used as indicators of the depth and breadth of human-environment relations in processes of environmental assessment processes as part of an effort to understand the potential effects of development on well-being. When something happens to the land, water and wildlife, there are reverberating effects within communities. People worry about what will happen to the land and their children in the future. As in other communities that depend significantly on the land and resources for their livelihood, these unnatural changes are the cause of significant anxiety (Usher 1991; Bielawski 1992).

The reification of “environmental change” as a new problem caused by development or climate is problematic, however, given the extent of variability characteristic of arctic ecosystems. Elders in Lutsel K’ee, distinguish between natural change and development effects- edo and change that is perceived as unnatural – edo aja – which translates directly as “something has happened to it” (Parlee et al. 2005). As such some aspects of ecological variability (cycles, patterns etc) are accepted and entrenched in livelihood practices. “Arctic hunters and herders have always lived with and adapted to shifts and changes in the size, distribution, range and availability of animal populations. They have dealt with flux and change by developing significant flexibility in resource procurement techniques and in social organization” (Nuttall et al. 2005:11-27). Increasingly however, declines in traditional food consumption are accompanied by increases in store-bought food which has both short and long term consequences for individual health (Egeland et al. 2011). Integration into the wage economy is one of the key drivers behind declining participation in hunting, trapping and fishing in many regions, a trend precipitated and compounded by the rapid pace and scale of socio-cultural change across the north.

Self-Determination, Human Security and Well-being

Another critical dimension of well-being in the context of resource development is that of self-determination. This concept, which is multi-scale in nature, can refer simultaneously to individuals as well as nations. The issues of control over self and community go hand in hand with land and resource rights and sovereignty such as that defined in many land claim agreements. The concept of self-determination is also strongly tied to emergent discourses on human security in the arctic.

Human security is used globally to speak to human development; it is generally defined as "safety from such chronic threats as hunger, disease, repressing and hurtful disruptions in the patterns of daily life" (Axworthy 2001). The evolution of the term "security" from one of militaristic meaning to one in vogue in sociology, geography and health discourse has resulted in a broader conceptualization of the socio-economic and cultural determinants of well-being. Human security in the Arctic is concerned with the intersection of power and governance and the social, economic political and environmental factors that contribute to the well-being of arctic peoples (Daveluy, Lévesque et al. 2011). It has become a popular concept in arctic policy discourse in Canada as
federal and territorial governments seek to maintain sovereignty (i.e. military security) amidst mounting global interest in the mineral, oil/gas, and hydro-electric potential and the sudden access to those resources that has resulted with melting sea ice in the north-west passage of Nunavut (Borgerson 2008). Among the concepts of greatest currency is that of food security (Huish 2008). The World Health Organization defines food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. The concept generally considers both physical and economic factors that limit or facilitate access as well as cultural attributes that determine food preference. In Canada, 21% of Aboriginal households are at risk for being “food insecure”, however, in northern Canada, the statistics are twice as high in some communities in Nunavut (Egeland, Johnson-Down et al. 2011). Food insecurity is compounded in the north by high levels of unemployment and higher than average cost of food.

References


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