

NUNAVUT: A POTENTIAL NEW MODEL FOR ECONOMIC DEVELOPMENT

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Key Words: Economic Development, Indigenous Communities

ABSTRACT: The Territory of Nunavut, Canada, was created in 1999 as a vehicle of self-determination for the country's Inuit population. Carved from the Northwest Territories, Nunavut became Canada's lowest-income province or territory. At the time, hopes were high for a new model of development based on Inuit values, newly codified land rights, and a wealth of natural resources. A decade later, has Nunavut resulted in a new, effective, and sustainable model of economic development for its residents? Does the territory offer any lessons, in turn, for other low-income regions of the developed or developing world? This paper investigates these questions, based on field research and review of available literature.

ACKNOWLEDGEMENTS: The authors thank the anonymous reviewers of this article for their many helpful suggestions, as well as University of Southern Mississippi Economic Development graduate assistant Daniel Aassamah for his research work.

1. INTRODUCTION

As economic development (ED) academics and practitioners, we are constantly searching for new and alternative models of ED that may meet the challenges of rural communities and low-income regions. Much of modern ED theory and practice in the U.S. and elsewhere in the developed world has focused on high technology, industrial clusters, and high levels of human capital: factors in scarce supply for many disadvantaged communities. The authors of this article both serve economically challenged regions, in the U.S. South and the Australian North, respectively. For a potentially fresh model, we turned in a less-traveled (and, for the authors, much less familiar) direction: the far north, specifically the Canadian Territory of Nunavut. Since much of the classic development literature concerns regions such as U.S. South, Africa, or Latin America, this article differs by presenting a potentially new model that is derived from a unique ED framework from the Canadian arctic that merits closer investigation.

Nunavut was created in April 1999, carved out of the Northwest Territories. The tree line forms the rough demarcation between the new territory and the remaining Northwest Territories, with nearly all of Nunavut classified as arctic climate. This relatively new territory includes nearly 20 percent of Canada's entire land area, but the population as of 2012 is estimated at just 33,697 (Government of Nunavut, 2012a), scattered across approximately 28 small communities. The most recent (2011) census count for Iqaluit—Nunavut's largest community and territorial capital—was 6,699 (Statistics Canada, 2012c), while some of the other communities number only a few hundred in population.

In many characteristics, the territory represents a classic lagging development region. Nunavut's population is Canada's youngest, with the highest birthrate of any province or territory in the country, together with the country's highest unemployment rate—the latter 14.8 percent in 2012 (Statistics Canada, 2012e). Like other lagging regions, Nunavut's population is heavily dependent on transfer payments, government services and employment, and primary-sector economic production (in particular, mining, fishing, and hunting).



Figure 1. Map of Nunavut. Source: the authors, based on University of Alabama Cartography Lab, Online version accessed April 25, 2011: alabamamaps.ua.edu/contemporarymaps/world/americas/index.html

However, the Nunavut model of development also represents much that is distinctive among developing regions. The region's aboriginal—Inuit—people were the driving force behind the creation of the new territory, as a vehicle for ethnic self-determination (Mercer, 2008; Henderson, 2007; Dahl, et al., 2000; Duffy 1988). “Nunavut” means “our land” in the Inuit language of Inuktitut, one of the official languages of the territory. The population of

the territory is in large majority Inuit—approximately 85 percent—as is the territory’s leadership. In comparison, aboriginal peoples constitute 3.7 percent of the overall Canadian population (Statistics Canada, 2011).

Inuit self-determination, as realized in Nunavut, is political, cultural, and economic in nature. The Inuit people of Canada enjoyed virtually no political representation until 1965, when the first Inuk (singular of Inuit) was appointed to the governing council of the Northwest Territories. The first Inuk was elected to the national House of Commons in 1979 (Mercer, 2008). The vote in today’s Nunavut is open to all residents; since the territory’s population is approximately 85 percent Inuit, however, most of the local and territorial leadership is Inuit, as well as the territory’s representation in national bodies.

In comparison with other lagging regions of the developed world the Inuit have experienced a rapid rate of social transformation. Until the 1950s, when the Canadian government began aggressively promoting permanent settlements to facilitate health care, education, and other resources, the large majority of the Inuit people lived a traditional, semi-nomadic, economic subsistence lifestyle (Duffy 1988). Most of today’s Nunavut population is only a generation or two removed from a life of subsistence seal hunting, caribou-skin tents, and igloos. Economically, the Inuit continue an uneasy transition from an informal, largely communal economy to an increasingly commercial economy (Gombay 2005, 2011).

Nunavut is rich in natural economic resources, including gold, uranium, iron ore, and other minerals, along with proven natural gas and oil reserves. The area encompasses natural landscapes and wildlife with tourism appeal; commercial fisheries; and hunting stock such as seals and polar bears (Government of Nunavut, 2010b). Further, global warming may expand the potential for exploring and exploiting such resources in the future, as well as opening sea lanes for greater access to the markets of the outside world (Smith, 2010). The 1993 Nunavut Land Claims Agreement (NLCA) negotiated by the Inuit people, provided the Inuit with a greater degree of control over their own resources, and perhaps greater potential to shape their own economic destiny.

This paper seeks to answer three main questions: (1) What are Nunavut’s ED strategies? (2) Given the unique nature of Nunavut itself, do these strategies suggest a distinctive model of ED for a lagging development

region? (3) To what extent are these strategies being implemented, and what results have these strategies produced for Nunavut? Field research¹ and review of the available literature inform this paper and its conclusions.

2. THE CREATION OF NUNAVUT AND THE DRIVE FOR ECONOMIC SELF-DETERMINATION

The capital city of Nunavut, Iqaluit was founded at the site of a traditional Inuit camp in 1942 as a U.S. airbase. The Distant Early Warning System in the 1950s established remote bases across Nunavut and the Northwest Territories. These developments provided the region's Inuit population with their first large-scale opportunities for employment, public services, and permanent settlement. Prior to these landmark events, "land was used and 'owned' as a collective.... Before European contact, there was little competing interest for the land where the original people resided. They lived on the nuna [Inuktitut for "land"] and made use of its resources and wildlife.... This is aboriginal title..." (Mercer 2008, 31- 35).

Discussion of land rights for the Inuit began in earnest in the 1960s, typically among the young Inuit who were studying at residential high schools and tertiary institutions in the south (Mercer, 2008). Originally these discussions included the Canadian Inuit as a whole. Over time, however, the Inuit outside today's Nunavut opted out of the discussions to pursue other development opportunities. On the political front, the Inuit Tapirisat

¹ Fieldwork consisted of personal observations and interviews with government and organization officials (at the federal, territorial, and municipal levels) in the capital city of Iqaluit, the mining-active community of Baker Lake, and the community of Pangnirtung (telephone interview) which is noted for its art and craft work as well as its proximity to Auyuittuq National Park. The lead author interviewed administrators representing Nunavut Tourism, the federal Canadian Northern Economic Development Agency (CanNor), the Nunavut Department of Economic Development & Transportation, the federal Parks Canada agency, Nunavut Economic Developers Association, a municipal government, and two tourism-oriented museums/visitors centers; plus, a high school principal, former cabinet minister, a locally-based private entrepreneur developing real estate and servicing the mining industry, a former administrator of the Nunavut Department of Economic Development & Transportation, and an economic development consultant under contract with a municipality.

[brotherhood] of Canada (ITC) was formed in 1971, out of the earlier ‘Indian-Eskimo Association’ (Duffy, 1988; Inuit Tapirisat Kanatami, 2011). Shortly thereafter in 1973, the *Calder v. British Columbia* case, the Canadian Supreme Court upheld the historic right to aboriginal title. Section 35 of Canada’s 1982 constitution further enshrines the rights of all the country’s aboriginal people. In another legal and intellectual antecedent to Nunavut, the Inuit and Cree peoples of Quebec realized the James Bay and Northern Quebec Agreement in 1975.

From the earliest years of its formation, the ITC used the terminology ‘Nunavut’ and insisted on linking the formation of an Inuit homeland with Inuit land claim negotiations—contrary to the wishes of the Canadian federal government. Political self-determination was essential to realize one of the ITC’s primary goals: development for the Inuit people based upon ‘Inuit Qaujimajatuqangit’, commonly abbreviated as ‘IQ’ and variously translated as traditional Inuit knowledge, principles, values, institutions, organizational systems, or technology.

After a decade of complex, persistent, and difficult negotiations, the Inuit and the Government of Canada reached a comprehensive land claim agreement in 1993 (Nunavut Tungavik, Inc., 1993), with one unique distinction from all other Canadian aboriginal land claim agreements: the creation of a new political entity on the Canadian map, the new Territory of Nunavut (Article 4 of the NLCA). In the process, the Inuit of the new territory surrendered their aboriginal claims in exchange for receiving legal title to some 350,000 km² of land—out of Nunavut’s total land area of 1,932,255 km², or approximately 18 percent of the total. For perspective, the area of the Nunavut Inuit’s legal claim alone is nearly the size of the U.S. state of Montana. The total land area of Nunavut is larger than that of Australia’s state of Queensland.

This comprehensive agreement specifies use of lands, waters, and wildlife in accordance with traditional Inuit usage and knowledge—as well as Inuit self-determination in economic resources and development. Article 5 of the agreement, for example, establishes a Nunavut Wildlife Management Board which grants the Inuk ‘the right to harvest wildlife’. In addition designated Inuit Organizations “... shall have the right of first refusal to establish new sport lodges and naturalist lodges in the Nunavut Settlement Area...” (Nunavut Tungavik, Inc., 1993). Article 23 of the agreement details an aggressive affirmative action program for expanding employment for the

Inuit population, through analysis, setting short and medium term goals, removing discriminatory policies, recruiting and training. The agreement also includes provisions for the Inuit population for preferential government contracting, both for the federal and territorial governments (Article 24); royalty sharing (Article 25); and Inuit Impact and Benefit Agreements for all major development projects (Article 26). Article 27 specifies that Designated Inuit Organizations must be consulted prior to “exploration, development or production of petroleum” or other natural resources anywhere in Nunavut (True Inuit autonomy with regard to non-renewable resources is tempered by long-standing debate over the relationship in this regard between Aboriginal rights and Canadian federalism [Government of Canada, 2012, 2010a; Hamley, 1995; Notzke, 1994]).

The proposed NLCA was made available in three languages—English, French, and Inuit Inuktitut—and presented in numerous public meetings across the proposed new territory (see figure 2 below). A majority of voters in each of the three regions of the proposed Nunavut territory ratified the agreement in 1992. Once ratified, the Agreement established a detailed timetable for the vast amount of political discussion, planning, and preparation that would be required for the official partition of the Northwest Territories and creation of Nunavut Territory by 1999.



Figure 2. Stone designating Nunavut Legislative Assembly building, Iqaluit
Source: photo by Mark M. Miller.

3. NUNAVUT IN THE CONTEXT OF ED STRATEGIES FOR DEVELOPING REGIONS

Dahl, *et al.* (2000) ask “Does Nunavut represent a new type of political economy and society, as some of its supporters claim?”. We question a more specific version of the same: Does Nunavut represent a new type, or model, of ED for a developing region? If not, then how does it fit into our standard typology of ED models?

ED organizations in Nunavut today would be familiar to most ED practitioners from North America, New Zealand or Australia. The ED and environmental functions were originally combined in one department—emphasizing the Nunavut desire for sustainable development—but later separated out to avoid potential conflicts of interest. The functions of the

present Nunavut Department of Economic Development and Transportation include policy and planning, promotion and recruitment, coordinating the efforts of local agencies, and working with outside agencies and potential investors (Government of Nunavut, 2011a). The Nunavut Development Corporation (2011) and Nunavut Economic Developers Association (2011, 2010) similarly hold functions that would be familiar to most North American or Australasian ED practitioners.

The Nunavut Economic Forum (2011) serves as a clearinghouse for economic data, analysis and policy; the Forum includes representation from a broad range of Inuit organizations, territorial government departments and other organizations, federal government agencies, NGOs, municipal associations, and chambers of commerce. Their work is well regarded across the Nunavut ED spectrum. In addition, Nunavut's Designated Inuit Organizations are powerful and unusual ED players. The Nunavut Land Claims agreement specified that Inuit organizations would implement the terms of the agreement on behalf of the Inuit people (Article 39). These organizations consist of the territory-wide Nunavut Tunngavik Inc. (2011), plus three other, regional organizations corresponding to the three recognized regions of the Nunavut territory.

ED planning in Nunavut also follows a pattern familiar to most ED organizations or private firms: a vision which is guided by core values, providing a foundation for measurable objectives and strategies for achieving those goals (Barney and Hesterly, 2011; Collins and Porras, 1996). Building on earlier ED planning documents, the 2009 document *Tamapta: Building our Future Together*, p. 3 (Government of Nunavut, 2009), reaffirms values and vision for the development of Nunavut:

OUR VISION

Guided by Inuit values and culture, by the year 2030:

- Nunavummiut will continue to have a highly valued quality of life and a much better standard of living for those most in need.
- Individuals and families will all be active, healthy and happy.
- Communities will be self-reliant, based on Inuit societal values, with reduced dependence on government.
- Nunavut will be recognized for our unique culture, our ability to help one another, and for our useful contributions to Canadian and global issues. Source: "Nunavut ED strategy"

The 2003 document, *Nunavut Economic Development: Building a Foundation for the Future* (Sivummat Economic Development Strategy Group, 2003) articulates specific and largely measurable objectives toward achieving the vision. For example:

Our Expectations for Harvesting [hunting] by 2013

- Land-based training will be integrated into schools as a means to instill basic life skills and to maintain knowledge of the land.
- The number of harvesters will be maintained or will increase, and the role played by women in the harvesting economy will be fully recognized in economic development policies and programs.
- The allowable harvest of caribou and musk ox will amount to \$35 million² annually in food and value-added production. (p. 9)

Our Expectations for the Arts Economy by 2013:

- This sector will contribute at least \$50 million annually to the Territorial economy, while providing 250 full time jobs, in addition to maintaining its high rate of participation by thousands of Inuit.
- The contribution made by women to the arts economy will be fully recognized.
- We will identify and work for the removal of trade barriers to the export of Nunavut art made with bone, baleen, ivory or skin.... (p. 12)

² All dollar figures in this paper refer to Canadian dollars (CAD). Over the past ten years, the exchange rate with the Australian dollar has fluctuated between 1.33 and 0.94 AUD per 1CAD. (Over the same period: between 1.06 and 0.66 USD per 1CAD.) The document cited here does not specify real or nominal valuation, probably reflecting rough estimates for dollar targets.

Our Expectations for Mining by 2013....

- We will establish 100% reclamation bonding for all mining activities.
- A geoscience database will be established, covering at least 75% of Nunavut's landmass, to support exploration and investment decisions.
- There will be at least four mines operating in Nunavut.
- No less than 50% of all expenditures associated with mineral exploration and production will accrue to Nunavut's labour force and businesses....
- A sustainable mining policy and development strategy will be in place. (p. 21)

A number of subsequent assessment reports (the latest: Nunavut Economic Forum, 2010) and "report cards" (North Sky Consulting Group, 2009) track progress toward these objectives in qualitative and quantitative terms. What, then, are the strategies to realize these objectives? And, how do these strategies fit into the context of ED strategies elsewhere in developing regions?

Classic developing economies are characterized by a heavy dependence on natural resource extraction—generally with fairly little value added beyond simply licensing or export sales. Much of ED theory and practice, in turn, has focused on industrial development and building a more diverse economic base. Roots of modern ED theory and practice can be found in the challenges of the U.S.'s own lagging regions (Miller, 2009). The 1930s' Tennessee Valley Authority (TVA) provided one model of regional ED for decades in the U.S.: a top-down, federally funded and planned administration of a lagging region that crosses local political boundaries, is comprehensive in nature, and emphasizes the region's unique natural resource assets. Development from 'below' or 'within' (Stöhr & Taylor, 1981) later emerged as a counterpoint to the TVA's more top-down model, but inspired relatively little academic or practical follow-up (Riker, 1994/5, Nel, *et al.*, 1997).

In contrast, private sector-based, industrial (usually manufacturing) recruiting—or what has been termed the 'first wave' strategies of ED (Bradshaw and Blakely, 1999)—has emerged as the still-dominant mainstay of ED throughout most of North America (Economic Development Association of Canada, 2011) since Mississippi's Balance Agriculture with

Industry Act of the 1930s. Despite its near-ubiquity elsewhere, first wave, industrial recruitment strategies play a relatively little role in Nunavut's ED efforts. Lack of infrastructure and energy, high transportation costs, and labor shortages render large-scale manufacturing largely moot in Nunavut. External investment, especially in the mining industry (as will be discussed below), appears to be driven mainly by the territory's resources and commodity price levels, rather than salesmanship.

'Second wave,' enterprise zone-type strategies are not represented in Nunavut³. To the contrary, Nunavut presents a higher regulatory burden for business than most other regions of the country, in terms of hiring practices, cultural sensitivities, environmental concerns, and so on.

The 'third wave' strategies of ED, inspired largely by Porter's (1990) work—widely embraced across the U.S., Australia and Canada (Invest in Canada 2011)—emphasizes human capital as a critical local resource. The concept of human capital as key to modern successful ED is also central to Florida's (2004) theories of the 'creative class.' Social capital theory, meanwhile, emphasizes the importance of human interrelationships within and among communities (Putnam, 2001; Hutchinson and Vidal, 2004).

One might argue that IQ-based planning for Nunavut's ED antedated Florida's (2004) popular conception of the Creative Class; Nunavut ED officials half-joke that the Inuit's unique survival abilities in their harsh environment represent an original example of a 'knowledge-based economy' (Government of Nunavut, 2010). Specific strategies that employ IQ or the local creativity community include traditional arts and crafts (Government of Nunavut, 2012e) and tourism which emphasizes the knowledge of expert local planners and guides (Government of Canada, 2010b; Government of Nunavut, 2011e; Cohen et al., 2008; Snyder and Stonehouse, 2007).

Similarly, the emphasis of IQ on social networks and community-based decision-making are familiar elements of social capital theory, but were documented in Nunavut well before that theory gained significant attention in applied regional planning and development circles (Hutchinson and Vidal, 2004). Subsequent social capital research in developing countries such as India has explored the tensions between modern, commercial economies and traditional social support networks (Henthorne et al., 2006). In Inuit society

³ Although still common in the U.S., in Canada the model was embraced briefly then largely abandoned as a failure (Peters and Fisher, 2002, Beaugard-Tellier, 2011).

in particular, Gombay (2011) notes the close relationship between the traditional communal economy—in particular, the sharing of “country foods,” or fish and game—and the reinforcement and reproduction of social relationships.

Blakely and Leigh (2009) suggest that today ‘sustainable development’ represents a fourth wave of ED strategy. To some, sustainable development⁴ means development that must include (or, perhaps, be constrained by) environmental and social as well as economic dimensions (Reese & Sands, 2007, p. 26). Others argue that sustainable development is ED that can be multiplied by the addition of environmental and social dimensions (Roberts and Cohen, 2002; Slaper and Hall, 2011).

The new Territory of Nunavut was guided by the Nunavut Land Claims Agreement and the 1999 Bathurst Mandate (*Australian Indigenous Law Reporter*, 2000). Both documents are filled with language that suggests a sustainable approach to development, as per the following from the Bathurst Mandate:

Self-Reliance (Namminiq Makitajunarniq)....

Principles that will guide us are:

- We will work within our means;
- We will incorporate traditional activities and values into new strategies to participate actively in the development of our economic resources;
- We will build on our strengths, respecting and highlighting the unique elements of our residents, communities, and the environment and economy in Nunavut;
- Nunavut residents should receive every opportunity to benefit from public dollars spent in and by Nunavut;

Some of the earliest ED planning documents for Nunavut, and among those most frequently cited in interviews, include *Qanijijuq (Preparing for the Journey)* (Nunavut Economic Forum 2004) and the *Nunavut Economic*

⁴ Sustainable development is an elusive term that has different meanings to many people. For a good discussion of the term and its variable meanings- see Gunder and Hillier (2010).

Outlook: Examination of the Nunavut Economy (Vail and Clinton, 2001). *Outlook* uses terminology of “sustainable development” (p. 9) “social capital” (p. 8), and “new economy” (p. 9): concepts that were in current, but quite limited, use in North American ED practice at the time of the report. The concept of sustainable development was in common use by that time in academic and advocacy literature (Ross and Usher, 1986; World Commission on Environment and Development, 1987). However, the concept did not become part of the standard professional ED toolbox and jargon in the developed world until the late 2000s (Friedman; 2008, Jones; 2008; Pernick and Wilder, 2007). The 2009 fourth edition of Blakely’s standard ED textbook was the first to include a discussion of “sustainable development” (Blakely & Leigh 2009).

Nunavut documents emphasize the specific, local, culturally-driven meaning of the often over-used and under-specified concept of sustainable development. There is an extensive literature on Indigenous Knowledge in general, in the context of sustainable development, as well as IQ in particular (Arnakak, 2011; Government of Nunavut, 2011c, 2011d; Peter, 2000; Usher, 2000; Agrawal, 1995; Wenzel, 1999). The following outline of IQ principles from a recent key Government of Nunavut development document (Government of Nunavut, 2009) provides one brief :

- Inuuqatigiitsiarniq: respecting others, relationships and caring for people.
- Tunnganarniq: fostering good spirit by being open, welcoming and inclusive.
- Pijitsirniq: serving and providing for family and/or community.
- Aajiiqatigiinni: decision making through discussion and consensus.
- Pilimmaksarniq/Pijariuqsarniq: development of skills through observation, mentoring, practice, and effort.
- Piliriqatigiinni/Ikajuqtigiinni: working together for a common cause.
- Qanuqtuurniq: being innovative and resourceful.
- Avatittinnik Kamatsiarniq: respect and care for the land, animals and the environment. (p. 7)

One of the major specific strategies for sustainable development focuses on mineral resources. The document *Parnautit: A foundation for the future Mineral Exploration and Mining Strategy* (Government of Nunavut, 2012d) lists “Community Benefits” and “Environmental Stewardship” as two of the four “pillars” for development in this sector.

It appears that the new territory intended from the outset to chart its own ED path, without depending on current models or fads from the academic literature (see Rowe, 2012, p. 74). The 2001 *Nunavut Economic Outlook* makes only one explicit reference to an outside ED source, which is a standard text on ED in the Third World (Todaro, 1989). After careful reflection, perhaps the best fit for the Nunavut ED model lies outside the traditional set of ED standards: the model of community development / economic development (CED). The Nunavut model perhaps more closely fits the definition of the Canadian CED Network (2011), as:

... action by people locally to create economic opportunities and better social conditions, particularly for those who are most disadvantaged.

CED is an approach that recognizes that economic, environmental and social challenges are interdependent, complex and ever-changing.

To be effective, solutions must be rooted in local knowledge and led by community members. CED promotes holistic approaches, addressing individual, community and regional levels, recognizing that these levels are interconnected.

The Canadian model is based on Phillips and Pittman (2009) and Pittman, et al.’s (2009) community development process that “... produces assets for improving the quality of life and business climate, and economic development mobilizes these assets to realize benefits for the community” (Pittman, et al., 2009, p. 80). In the Nunavut model, however, *economic* development can also be driven by *community* development priorities such as cultural and environmental sustainability, and political sovereignty. In Australia, mining operations often are on Aboriginal lands. As a result, the mining companies often reach agreements with the traditional land owners on royalties and training programs for local indigenous people. The royalties fund community and cultural development initiatives.

Gombay (2005, 2011) ties this viewpoint to the Nunavut model in her studies of Inuit society: the "... dual and parallel worlds in which the Inuit live" (Gombay, 2011, p. 133) include both a traditional society in which available food resources are freely shared according to need, intersecting with the growing commercial economy. Since 1959, efforts to develop Inuit cooperatives—especially those focused on traditional arts and crafts—have attempted to stake out a middle ground between these dual worlds (Arbess, 1966, 1967; Duffy, 1988). Gombay (2011, p. 166) concludes that "We live in a world in which society must increasingly fit into what seems to be economically rational. What I came to understand (through research in Nunavik) is that many Inuit seem resolved to live in an economy that is socially rational".

4. THE REALITY OF NUNAVUT'S ED PROGRESS AFTER THE FIRST DECADE

Has the Nunavut model been an ED success, over a decade since its inception? Firstly, is the territory implementing its ED strategies? Secondly, has Nunavut achieved ED in traditionally recognized terms, such as more employment opportunities, lower unemployment, an expanded range of employment opportunities—or, ideally, higher overall quality of life indicators? Thirdly, in the face of inevitable pressures for development and economic growth, has the new territory remained true to its vision of a unique development path?

Implementation and infrastructure for development- Economic development is happening in Nunavut: not uniformly across the population or across communities, but certainly in a few communities such as Iqaluit (government) and Baker Lake (mining). This begs the question, however, of whether these developments are the result of ED practice and implementation, or the result of ED as a natural process of the market economic—driven by high commodity prices, for example.

The challenges are exacerbated by the global recession. As a result, successful implementation of non-mining ED strategies is not encouraging to date. Targeted sectors such as tourism, non-mining construction, and the production of goods remain stagnant or in decline. The public sector share of overall employment continues to hover around 50 percent, and government

transfer payments continue to support a major share of the economy (Nunavut Economic Forum, 2010).

Probably the greatest frustration expressed in interviews, however, concerned the slow pace of implementation for the basic infrastructure necessary to make real progress in ED possible. Nunavut continues—and sometimes struggles—to invest in infrastructure, ranging from basic to ED-specific. Officials proudly point out Nunavut’s international leadership in Internet access: every community in Nunavut has broadband access via satellite, with plans for continued public-private investment to enhance bandwidth, public availability, and classroom connectivity (Government of Nunavut, 2010). Education spending has increased over the past five years, both in overall dollars and in terms of real spending per student (Nunavut Economic Forum, 2010).

None of the communities of Nunavut are connected by road or rail or with any communities outside the territory. The only new road of note is the 110 km all-weather road, which connects the Meadowbank gold mine with the community of Baker Lake. It is the longest in the territory. A possible road connection between Hudson Bay, Manitoba, and Nunavut’s Arviat and Rankin Inlet communities remains under study. The project is estimated at over \$1.2 billion, requiring over 50 bridge crossings (Government of Nunavut, 2010).

Meanwhile, the territory remains largely dependent on the annual ‘sealift’ for nearly all basic commodities and supplies from the south, which is limited to the few months between July and September when containers can be sent by cargo ship from southern ports such as Montreal. Even then they are often hampered by a lack of port facilities and reliability problems (Windeyer, 2010b). A lack of port facilities also limits the economic multiplier potential for cruise ships, which primarily come to view offshore scenery and wildlife. Air is the dominant mode of passenger transportation, including for health and emergency care, at great expense (George, 2011).

In addition, immediate challenges exist because every community relies on imported diesel for power, which must be carefully calculated around the short annual sealift delivery season. Nunavut’s arctic climate, lack of infrastructure such as cranes, and other factors present major obstacles to developing alternative energy sources such as hydroelectric, tide, wind power.

Indicators of economic progress and quality of life- Nunavut ED officials point with pride to the overall positive economic growth rate since the birth of the new territory (Government of Nunavut, 2010). Between 2000 and 2005, Statistics Canada reports an increase in median earnings for full-year, full-time employees in Nunavut, from \$50,542 to \$58,088 (14.9 percent), compared with the national median earnings change from \$40,443 to \$41,401 (2.4 percent) (Statistics Canada, 2006)⁵.

Despite these gains, Nunavut remains in many ways a classic lagging region. Although a decade of available statistics are too few to reflect a major impact of territorial independence (2011 was Canada's most recent census), anecdotal evidence suggests several persistent trends that remain typical of a region that still faces development challenges. Approximately 33 percent of Nunavut's population is age 0-14, compared with Canada's 17 percent (Statistics Canada, 2012b). The fertility rate for Nunavut remains the highest of any province or territory of Canada, by a wide margin, at 3.00 for 2010, compared with 1.63 for Canada (Statistics Canada, 2012a). As a result, the Nunavut population growth rate is the third highest among Canadian provinces and territories (Statistics Canada, 2012d), although this growth is tempered by substantial out-migration (Nunavut Economic Forum, 2010) even in times of positive economic growth. Yukon recorded the highest population growth rate (11.6%), followed by Alberta (10.8%).

Housing shortages, overcrowding, and poor conditions remain a serious problem in Nunavut (Cusack and Jakub, 2007; *Nunatsiaq News*, 2010b). This is despite construction of approximately 1,150 new public housing units by the Nunavut Housing Corporation since 2000. Poor housing contributes to high rates of infectious diseases such as tuberculosis (Zarate, 2010) and perhaps domestic violence (*Nunatsiaq News*, 2011a). Nunavut's crime rate is the highest in Canada, especially with regard to violent crimes, and continues to rise (*Nunatsiaq News*, 2010a).

⁵ The cost of living—in terms of food, energy, and nearly all other commodities—is much higher in Nunavut than elsewhere in the country. Translating economic growth into jobs remains a challenge, as well: 2010 data from the Nunavut Bureau of Statistics reports a 15.0 percent unemployment rate for the territory's population (aged 15 and over), up from 12.6 in 2009; comparable rates for the territory's Inuit population are 20.5 percent, up from 16.9 the previous year (Government of Nunavut, 2012b).

Industrial development- The mining industry dominates outside private investment in Nunavut's economy. The Agnico-Eagle Meadowbank gold mine, near Baker Lake, is the largest operating mine in the territory today, employing about 200 local residents from a total payroll of approximately 600. Local hiring has been limited to date by available local skills, as well as Baker Lake's local population of only about 1900⁶. The AREVA Resources Kiggavik Project uranium mine planned near Baker Lake is controversial, but will likely open in 2018. The very remote Jerico diamond mine, on the mainland, failed but was recently repurchased (Windeyer, 2010a). There are extensive iron ore reserves in vicinities of Clyde River and Pond Inlet, on Baffin Island's eastern shore. Like most primary-sector industries, investment and employment activities are subject to substantial fluctuation and uncertainty; high commodity prices at present give rise to optimism for the future, with exploration projects underway across the territory. A Chinese pipe-making company, for example, recently announced that it is ready to spend as much as \$1 billion to fast-track a proposed iron mine on Melville Peninsula into production (George, 2010c).

Hunting is a prospective tourism and product export industry—in addition to its role as a subsistence and key cultural activity for the Nunavut residents. At present International sensibilities are greatly limiting the potential for export production. Nunavummiut (residents of Nunavut and other Inuit communities) remain especially confused and frustrated, for example, by a European Union ban on the importation of seal products, and a U.S. ban on polar bear hides; these conflicts highlight the sometimes cross-purposes of Inuit IQ and outsiders' values (Duffy, 1988). Similarly, traditional Inuit arts and crafts provide a vital element of Inuit culture, but their economic value is limited by low and irregular numbers of tourism landings in local communities, as well as international import bans on raw materials such as seal skins and narwhal tusk (Nunavut Arts & Crafts Association, 2011; Nunavut Tourism, 2010).

Wages and royalties from the fishing industry (mainly shrimp and turbot) in Nunavut territorial waters are estimated between \$12 million and \$14

⁶ The number of direct jobs for the local population that are created by a mining operation is an on-going concern for most remote areas. Many mining operations in Australia employ fly-in and fly-out workers instead of employing locals because of the low skill levels of many local people.

million annually to the economy of the territory, resulting in about 300 seasonal jobs (Government of Nunavut, 2012c; 2010). This, however, represents only a small fraction of the total value of the catch. The territory strives to gain more local—especially Inuit—ownership, as well as more locally-based processing facilities.

The 2010 Nunavut Economic Outlook (Nunavut Economic Forum, 2010) is not encouraging with regard to the sustainability of the Inuit traditional, non-wage economy. Statistics and research in this sector lag behind those concerned with the commercial economy. It appears, however, that traditional skills in hunting and sealing, for example, are being lost with new generations raised in a wage-oriented economy, at the same time that key animal populations (especially caribou) are in decline.

Realizing “IQ” based development?- Amid this flurry of economic activity, and the temptations of growth sectors such as the mining boom, is Nunavut remaining true to its original vision of development based on Inuit IQ?

In interviews with the Department of Economic Development and Transportation (Government of Nunavut, 2010), several high-level administrators cited the Nunavut government’s 2009 report *Tamapta 2009 – 2013, Building Our Future Together: Government of Nunavut Priorities* (Government of Nunavut, 2009) which solidly reaffirms a commitment to a development vision “guided by Inuit values and culture.” The Department itself also asserts its commitment to IQ-based development in its website (Government of Nunavut 2011b; 2011c). Much of the criticism of the Department of Economic Development and Transportation, from interviewees who are either outside government or former government employees, focuses on the department’s perceived *over*-attention to arts, craft, and other cultural considerations, in place of more conventional business development and capacity-building for mining and other industries. Some interviewed critics suggest that department officials (particularly those who are non-Inuit) are attempting to reduce Nunavut citizens and their culture to museum pieces, rather than allowing them the freedom to develop and transform themselves however they may wish—a critique which is commonly heard in developing regions around the world.

Perhaps the most striking evidence of the reality of IQ in Nunavut is the willingness by prominent territorial organizations, courts, and leading citizens (typically elders) to slow or even halt development that is not conducted in accordance with IQ principles. While field research for this

paper was in progress in Nunavut, debate was raging over a German research ship that was conducting seismic testing for petroleum in Baffin Bay without sufficient prior consultation with community members. Inuit organizations protested and were finally granted a halt to the project by a Nunavut judge. During this same period, in another instance, both community groups (*Nunatsiaq News*, 2011b) and the very influential Nunavut Tunngavik Inc. (Rogers, 2011) are questioning the impending development of uranium mining in the territory.

Beyond good intentions, however, there clearly remains much work ahead toward realizing the vision of IQ-based development. A 'report card' issued by the Government of Nunavut (North Sky Consulting Group, 2009) included the following quote: "People believe we have lost our sense of purpose and belonging – our cultural connection to our land and to our families and communities and our balanced way of living life" (p. 2). As noted earlier, each new generation of Inuit is becoming increasingly dependent upon either the wage economy or government transfer payments made possible by industries such as mining. Therefore conflicts between sustainable, IQ-based development and demands for economic growth may be inevitable.

Income inequality is emerging as a major threat to the ideals of Inuit IQ, both within the general population and among the individual communities of the territory (Nunavut Economic Forum, 2010). The success of mining industries near Baker Lake and soon other communities are exacerbating these inequalities. As one ED professional working at a community level said in an interview, "We must focus on communities. What's good for communities is good for Nunavut, but what's good for Nunavut is not necessarily good for communities." Frustration also persists over slow progress in achieving proportional Inuit representation in employment (Windeyer, 2010c).

Perhaps the most serious threat to IQ and the persistence of the traditional Inuit lifestyle, however, may be external: the rapidly emerging reality of global warming in the arctic. Warmer weather is melting the permafrost and shifting the foundations of residences and public buildings; flora and fauna patterns are changing; sea ice is forming later and melting sooner. The early IQ of Nunavut residents (Windeyer, 2011; Rogers, 2010) is now being confirmed by outside research (Munro, 2011; George, 2010a; 2010b; Vastag, 2011; Boyle & Dowlatabadi, 2011).

5. CONCLUSION

From the earliest discussions that led to the birth of Nunavut territory, land rights, resource access, and other ED considerations have been central to the Inuit vision for the new territory. At the same time, economic strategy was—and appears to remain—either secondary to cultural, social, and other quality of life priorities or at least deeply intertwined with these priorities. Inuit IQ pervades all levels of ED and other development discussions, from the founding documents of the new territory to the most recent policy statements. Documents suggest, however, that the Nunavut independently developed concepts such as sustainable development, social capital, and the importance of human capital. These concepts were based on traditional local values (IQ) that form the foundation of the territory's culture, society, and policy.

Based on numerous interviews, many 'cultural conservatives' would say that Nunavut is losing its connection to traditional IQ and Inuit culture (some Nunavummiut may disagree with these conclusions). Conversely, many residents who are more ED-oriented will argue that Nunavut agencies (such as the Department of Economic Development and Transportation) are clinging to cultural traditions at the expense of modern economic opportunities for the territory and its residents. In our opinion, however, these forceful disagreements are the sign of a healthy, continuing dialogue that can help Nunavut stay its course through a challenging and dramatically changing environment ahead.

Will the Nunavut model of ED prove a success or a disappointing failure? At present, the objective economic and social data are mixed at best. Neither economic nor quality-of-life indicators are encouraging as of this writing. However, this paper is written in the midst of years of national recession. Furthermore, after only a dozen years since the creation of Nunavut, it is too early to pass meaningful judgment on the effectiveness of territorial policies. Meanwhile, optimism runs high for many residents (especially in communities such as Baker Lake) for a bountiful economic future. At minimum, the authors applaud the quality of planning and consistent attention to core values in Nunavut's ED efforts. This alone is refreshing given the willingness of many developing regions to pursue short-term perceived opportunities without regard to environmental, social, or fiscal community values.

Finally, Miller (2009) argues that the field of ED is long overdue for a new paradigm to guide lagging regions. Can Nunavut's ED strategies provide a new model for other developing regions of the western world? While the physical setting of Nunavut is unusual, it is not necessarily unique to lagging regions: Appalachia and many of the other U.S., Australian indigenous and Canadian aboriginal communities have similar harsh physical environments, infrastructure challenges, and the mixed blessings of natural resource endowments.

Similarly, 'IQ' is by definition unique to Nunavut and the Inuit regions of Canada and Alaska. Further, the NLCA provides the population of Nunavut with extraordinary local control over their own land and resources. The NLCA is the result of decades of vision, focus, organization, and perseverance: powerful lessons for other communities looking only in the short term for the latest economic fad or fix. Furthermore, the cultures and communities of many—perhaps most—developing regions have deeply rooted traditions and values. One questions how many other communities have truly embraced their own 'IQ' and incorporated these values into their own development visions and strategies? Nunavut, in these regards, provides a powerful and unusual model for developing regions far beyond the arctic.

Future research on Nunavut may be productively informed by the relatively fresh perspective of appreciative inquiry (Trosten-Bloom and Cooperrider, 2010; Koster and Lemelin, 2009; Cooperrider, et al., 2008). Such research offers an affirmative approach that examines organizations in terms of their highest potential, rather than in terms of their problems to be solved. Clearly Nunavut faces a large number of extraordinary and serious problems ahead; at the same time, the Nunavut model represents one of the most ambitious, optimistic, and positive experiments in locally-led ED in our experience.

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