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## **The Inuit commercial caribou harvest and related agri-food industries in Nunavut**

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**Abstract:** The commercial caribou harvesting and related agri-food processing industries in Nunavut have grown global since 1995. These industries have a significant impact on Nunavut's GDP, add key infrastructure, and foster self-reliance and employment for Inuit people in Rankin Inlet and Coral Harbour. The caribou hunt occurs once per year and is the largest in the world.

This case focuses on Kivalliq Arctic Foods and Coral Harbour Development Corporation and the local harvesting and processing of Nunavut's caribou meat products. Kivalliq's caribou meat products are exported to clients in the USA as well as the European Union. Both Kivalliq's processing plant and Coral Harbour's portable abattoir have received European Union Certification. The case discusses how the companies used quality assurance, aboriginal branding, e-commerce, and international trade shows to overcome barriers resulting from their northern isolation.

**Keywords:** indigenous entrepreneurship; economic development; community development; sustainable development; Arctic; caribou; northern Canada.

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## 1 Introduction

Government in Canada, since the 1970s, has stimulated entrepreneurship in aboriginal communities as a means to create self-employment and jobs and as a path to regional development. With the settlement of land claims, aboriginal leaders see economic development and aboriginal enterprises as a means to improve their people's abysmal socioeconomic circumstances. Inuit leaders are asking for Inuit and Northern specific research as they are culturally distinct from other aboriginal peoples and their communities must overcome significant barriers for economic development to occur. In the Dialogue on Northern Research (NSERC, 2004, p.7), priorities for future research to meet the challenge of developing a sustainable diversified economy, should include:

- Measuring/scoping economy/opportunities/social impacts/assessment
  - a incorporate value of traditional economy into economic accounting
  - b out migration
  - c resources – where? Capacities
- Work with communities to make informed choices
  - a identify values
  - b institutional mechanisms
  - c wealth management (local, territorial, FN – individual funds and royalties)
  - d gap between traditional management and new economic needs
  - e alternative development models
- Indicators of sustainability
  - a What are they?
  - b What is working well?
- Identify links between community health, living conditions, and rapid economic change

- Case studies/assessments/success stories
  - a Evaluate vulnerabilities/resiliency
  - b Evaluate independent business association/regime
- Cross-cutting planning/funding of research by three councils
- Develop international perspective.

This exploratory case study was undertaken to examine best practices in the development of a sustainable Inuit agricultural enterprise. The case is based on interviews with corporate and government officials, and on company and community information collected by performing queries using Pro Quest, ABI inform, Google, Yahoo, WorldCat, ECO, and ArticleFirst. The search terms included Inuit or Indigenous and Small Business or Enterprise; Caribou harvesting; Caribou processing; Kivalliq Arctic Foods; Keewatin Meat and Game; Rankin Inlet; Coral Harbour; Southampton Island; Coral Harbour Development Corporation; Nunavut Development Corporation; Nunavut Economic Development; and Northwest Territories Economic Development.

## **2 Inuit people Nunavut and the need for economic development**

In Canada, Indigenous peoples are culturally, historically, geographically, and politically diverse, though all share the experience of colonial domination. *The Constitution Act, 1982* of Canada, recognises three groups of Aboriginal people – Indian, Inuit and Métis. Inuit are the Aboriginal people of Arctic Canada and live primarily in Nunavut, the Northwest Territories, and northern parts of Labrador and Quebec. The Inuit do not live on reserves and are not covered by the *Indian Act*. Instead, Inuit have recently settled land claims with Canada and self-government agreements are being implemented. Nunavut forms 23% of Canada's landmass and two-thirds of our coastline.

In 2001, just one million or 3.3% of Canada's population self-reported as Aboriginal. Among people who identify themselves as Aboriginal, 62% are First Nations, 30% Métis, and 5% Inuit. This represented 45 000 Inuit people – with nearly half living in Nunavut.<sup>1</sup>

Nunavut with an area of 467 107 square km has a population of 27 039 that represents less than .01% of Canada's population. Inuit represent approximately 85% of Nunavut's population, but for communities other than Iqaluit (formerly Frobisher Bay), Rankin Inlet (Kangiqliniq) and Cambridge Bay, the percentage of Inuit is closer to 95%. Educational attainment of Inuit people is still below that of other Canadians – 3% of Inuit had University degrees; 24% had some college education or diploma; 54% of those ages 20–24 had incomplete high school or less (Treasury Board Canada, 2005).

The current economic and social circumstances of Inuit people are terrible. The 1991 census serves as a baseline for measuring the progress of Aboriginal People in Canada as this was used to do future projections by the Royal Commission on Aboriginal People (RCAP, 1996b). In 1991:

- 24% of Inuit reported receiving social assistance (as compared to 8% of other Canadians)

- 57% of Inuit were in the labour force (as compared to 68% of other Canadians)
- 25% of the Inuit labour force were unemployed (as compared to 10% of other Canadians)
- 43% of the Inuit adult population were employed (as compared to 61% of other Canadians)
- 57% of Inuit had less than \$10,000 total income (as compared to 34% of other Canadians).

The Conference Board of Canada's study in 2002 for the Nunavut government estimated an unemployment rate in Nunavut of 20.7% in 1999 based on a labour force of 10 904. According to the Nunavut Community Labour Force Survey (Nunavut Bureau of Statistics, 1999, p.8), when the 'no jobs available' definition was included – which included people who reported that the reason they did not look for work in the last month was because they perceived there to be no jobs available – the unemployment rate rises to 27.2% based on a labour force of 11 886. The Inuit unemployment picture is actually worse – 35.8% compared to non-Inuit at 3.3% in 1999 in Nunavut.

Key Inuit leaders indicate the health and society indicators are among the lowest in Canada. Since 1984, the Pauktuutit Inuit Women's Association (PIWA) has been the national voice representing Inuit women in 52 communities across the Canada's north. In PIWA's (2004) presentation to the 2004 United Nations Permanent Forum on Indigenous Issues, the Inuit women explained the problem:

“...Between 1996 and 2001, Canadian Inuit experienced a population growth rate of 12% – four times the rate of the non-Aboriginal population. Inuit now have an average age of just 20 years, compared to non-Aboriginal Canadians, who have an average age of 38 years....Inuit are at the extremes of Statistics Canada indicators: highest rates of unemployment, lowest income, highest cost of living, worst housing conditions, highest rates of communicable diseases, and shortest life expectancy of all Canadians.” (p.3)

Jose A. Kusugak, past President of Inuit Kanatami (ITK) which represents all Inuit people of the North repeated these concerns at the Aboriginal Roundtable on Aboriginal Issues. He then added, “Much of this painful social statistic can be tied to poor and overcrowded housing, an education system that fails its students, healthcare that doesn't reach the sick in a timely way, and chronic unemployment” (ITK, 2004, p.5).

According to Nunavut Member of Parliament for Canada, Nancy Karetak-Lindell Nunavut needs to:

“create the cycle of employment, disposable income and small business. Without the employment, the people have no money to put into the economy. Without money in the economy, there is nothing to support the small businesses, which are so crucial to providing a range of employment opportunities.” (Hutchinson, 2002, p.4)

The National Aboriginal Economic Development Board (NAEDB) indicated a need for enhanced capacity building to put Aboriginal people and their communities in a better position to pursue economic activities.

“Many Aboriginal communities and entrepreneurs have considerable catching up to do in terms of acquiring the skills needed to identify economic opportunities, form partnerships, negotiate agreements, design and operate

business ventures, and design and operate institutions that support economic development. As well economic development cannot be pursued in isolation from the general education and training needs of Aboriginal people.” (NAEDB, 2004, p.5)

The Land Claims Agreements are vehicles for Inuit to utilise their lands, financial resources, and benefits to realise their full potential, collectively and as individuals. The Inuit people are looking to develop an economy more in tune with their values and to improve their socioeconomic conditions and quality of lives. Myers (2000) states: “The implementation of Nunavut is not only a chance to attempt self-government, but an opportunity to develop more attuned to Inuit values and resources, and perhaps show the rest of the world what sustainable development really means”. According to the Nunavut Implementation Commission (NIC, 1995), “Government will represent an important – and necessary first step in allowing Inuit and other residents to take control of their own lives and futures, to generate their own opportunities, calculate their own trade-offs, and make their own choices” (p.57).

Watt Cloutier (2003) while Chair of the Inuit Circumpolar Conference addressed the World Summit of Indigenous Entrepreneurs and said:

“In the Inuit world, because of our numbers... in our communities we measure success one person, one family at a time. So a business...supporting 5 families is of considerable importance to us. While our lands lend themselves to mega projects, our sense of sustainability lends itself to smaller entrepreneurial businesses...With the growing realization that strong economies are essential for cultural survival, we have come to attach... more importance to economic and business development...Inuit, ...continue to work hard, to have the right to choose both subsistence living as well as participation in the global economy. With the globalization of the market economy, we cannot isolate ourselves from the world around us, nor do we wish to. We seek to be meaningful and influential participants...”

The RCAP (1996b) recommended enhancing opportunities for employment and business development among the Inuit, through development of the small business sector; selective commercialisation of the wildlife harvest; and specialised export development. It also recommended expanding the number and kind of opportunities available to aboriginal young people and adults to earn a living; strengthening the traditional-mixed economy; supporting both the older, more traditional sources of cash and employment, and new ventures in areas as not yet fully exploited; and ensuring that development considers environmental stewardship.

Finally, at the Canada-Aboriginal Peoples Roundtable 2004, the Inuit Break Out Group recommended considering the traditional economy and its sustainability; supporting the institutional and entrepreneurial pillars/cultures; encouraging more aboriginal, partnerships including twinning and mentoring processes between aboriginal businesses; using holistic approaches (integrate culture, heritage, community connected to the bigger Canadian community); building comprehensive economic development programmes – with all economic development elements addressed together; looking at the barrier faced by local businesses; building a northern perspective; and conducting research into commercial development and product application.

### 3 The communities

Rankin Inlet (Kangiqliniq), the second largest community in Nunavut, is located on the west edge of the Hudson's Bay about 500 km north of Churchill, Manitoba. The population of 2230 is 79% Inuit and 21% Non-Inuit. It was formed in 1955 when the Canadian government encouraged the Inuit to move into communities and the nickel mine was developed. However, the mine was shut down in 1963. The community has served as a regional centre for the Northwest Territorial Government and now the Nunavut Territory. Most people work for the government.

Coral Harbour (Sudliq or Salliq) is located on Southampton Island about a 90-minute flight from Rankin Inlet. Southampton Island is located in the entrance of Hudson Bay. The island has an area of 41 214 km square. This is Canada's 9th largest island. Coral Harbour, the only settlement on the island, has a population of 822 (94% Inuit and 6% other). It consists of about 50 families. Government transfer payments provided 90% of all community income. Hunting and seasonal work with the mining and exploration companies are important employment sources. Lack of jobs was seen as a high priority by the community.

### 4 Caribou, a traditional country food

*Rangifer tarandus* includes 'reindeer' (in Sámi), 'caribou' (Micmac), 'tuktu' (Nunavut Inuit) and 'kumaruaq' (Labrador Inuit). It is a member of the deer family *Cervidae*. Reindeer/caribou have been a primary source of food, shelter and transportation material for indigenous peoples in the Arctic and sub-Arctic from prehistoric times to the present (Kofinas *et al.*, 1999; Jernsletten and Klokov, 2002; Anderson and Nuttall, 2004). Traditionally, the Inuit used all parts of the caribou for food, clothing, shelter, packaging (bags and caches), tools, transportation, ceremonial artefacts, arts and crafts, and medicines. Today, harvesting traditional country foods like caribou is considered to be agriculture and renewable resources.

To the Inuit people, caribou is more than economic activity; it forms an integral part of the social and cultural way of Inuit life. Hunting has provided important kinship and community ties. Elders train youth in school and in camps how to survive on the land, navigate, hunt, skin caribou, cut and use all animal parts. Men worked together and hunted in teams. To ensure future sustainability, only enough animals were killed for their community needs. After the hunt, the food was first shared with the elders. It was then cut into smaller pieces to meet the current needs of the hunter's family and community. Then, caribou meat was shared among extended family and with family members located in other communities. Excess meat and skin were cached for future needs. If neighbour families were ever short food, the meat would be shared. Caribou was often traded for other products. The caribou also provided an important role in social interaction and ceremonies. Thus, the land and people were closely interconnected.

Many Northern Canadian residents still depend on the caribou for food. According to the Beverly and Qamanirjuaq Caribou Management Board (BQCMB, 2004), the value of the resident caribou harvest was estimated for about \$17 million dollars in 2001 and the cultural value cannot be estimated. According to the Tungavik Federation of Nunavut (TFN, 1989), "The animals we kill provide us with highly nutritious food which is shared

with other Inuit who cannot, or do not, go hunting”. A recent Statistics Canada survey found that almost 31% of Inuit households in Nunavut, Canada eat caribou daily or almost daily; while only 16% rarely or never eat it.

Caribou is a nutrient dense food. Eating all parts of caribou (meat, milk, organs, blood, bone marrow, and oil) provides a majority of nutrients which in a southern diet would be obtained from a variety of foods. “Vitamin D is the only essential nutrient that caribou lack”. Caribou meat is low in fat: 1 g fat per 100 g portion (cooked). The equivalent value for beef is 23, for veal 12, for chicken 13, for pork 45, and for lamb, 28. In terms of protein the comparative equivalencies per 100 g are: caribou 38, beef 17, veal 19, chicken 20, pork 12, and lamb, 16. Ninety grams of cooked caribou provides 170 calories or 711 kJ. It is made up of 72% protein, 5% fat, and 0% carbohydrate. For example, a 100 g serving of roasted caribou yields 30 g of protein (BQCMB, 2003a; BQCMB, 2003b). In an increasingly calorie conscious consumer market, caribou products may become more competitive with beef and chicken as an alternate meat source.

## **5 Development of the Nunavut caribou industry**

The NWT and Federal government partnered to examine the feasibility of creating economic opportunities (jobs) by expanding into large scale hunts in the early 1980s. The NWT Department of Economic Development and Tourism (DEDT) encouraged the formation of a local chamber of commerce, and placed a development officer in Coral Harbour, the summer of 1986 to examine economic development opportunities (Christie and Ferrazzi, 1991). For export across the territories and into the rest of Canada and the USA, Agriculture Canada needed to inspect and certify the slaughter and processing of the caribou. The objectives of these hunts were to cover the costs, provide meat to the local community, and to determine whether there was a market for caribou meat exported from Canada. The territorial government (keeping in mind that 90% of territorial government spending is a direct transfer from the federal government) provided economic development grants to the communities for the capital infrastructure. They also assisted with the development of business plans, marketing and actually running business operations.

According to Dragon (2002) (quoting Bisette), “Caribou meat from organized hunts sold for between \$0.25 and \$0.75 per pound. Meat was either given to welfare recipients, sold cheaply to GHJ holders or was sold locally to local institutions, such as newly formed hostels. These hunts continued sporadically through the 1970 and 1980s.”

The caribou on Southampton Island had already suffered a population crash. Until the 1900s, caribou were abundant. Over hunted with the advent of the whalers and fishing boats, by 1935 caribou were rare on the island. The last caribou died in 1953. In 1967, 48 caribou were reintroduced to Southampton Island from Coates Island in 1967. This herd was unique as it did not migrate – the island acted as a barrier. Local hunters and trappers voluntarily imposed a no hunting policy on the island. With no natural predators, the herd had grown to more than 30 000 caribou. However, the island could not continue to sustain the herd size as the caribou was growing at a rate of 27% per year and was depleting the lichen and willows. In 1989, hunt quotas were increased to 300 males and 100 females.

In Coral Harbour, the Aivitt Hunters and Trappers Association (AHTA) started its first cull of the Southampton herd in 1993. Funding allocations were made in an economic agreement between the federal and territorial governments 1991–1996. Grants were provided to subsidise costs associated with shipping, supporting infrastructure development, and conduct population inventories. Trial hunts were conducted to develop local expertise in commercial meat processing. Agriculture Canada veterinarians and project managers were used who had southern experience in commercial meat operations.

The first pilot commercial harvest was held on Southampton Island in 1995–1996 with a quota of 3000 caribou. This provided 38 seasonal-hunt related positions. Three Northwest Territory government departments had allotted \$1.1 million under the federal-territorial Economic Development Agreement. The departments included renewable resources, economic development and tourism and education. The hunt's target was 2000 animals or about 150 000 lbs. of caribou. Ten new seasonal jobs were created in Coral Harbour for hunters, skinners, packers, cooks and maintenance personnel. People received training in skinning, proper packaging, and other harvest related skills (Bremer, 1995). The commercial quota was expected to expand to 4000 caribou for 1995–1996. This second year, twelve additional jobs were provided in Coral Harbour. Tunnuk Harvest Ltd., the business arm of the AHTA operated the abattoir site. By 2001, about 3500 caribou were brought in.

## **6 Kivalliq Arctic Foods Ltd. (KAF)**

In October 1992, Keewatin Meat and Fish Ltd. (KWF) was formed to harvest, process and market Arctic char, caribou and musk-ox within the Northwest Territories. It operated out of Rankin Inlet. (The company was 100% owned by the Keewatin Development Corporation – a crown corporation of the Northwest Territorial Government.) The company changed its name to Kivalliq Arctic Foods in 2001 to more closely identify with Arctic foods and also to be market rather than product driven.

Lacking experienced management, the company had recruited Brian Schindel from Saskatchewan to be General Manager. However, most of the employees were local Inuit people.

The company's Rankin Inlet processing plant burned down in 1997. The decision was made to rebuild the plant with a different floor plan to change the employee and product flow. Quality assurance and food safety had become critical, as Europe had dealt with spoiled reindeer meat coming to market in Finland Hannu Heikkinen, Bovine Spongiform Encephalopathy (BSE) or 'mad cow' disease in England, and outbreaks of salmonella, listeria, and cholera in the EU. The rebuilt plant had more efficient layout, used new stainless steel equipment, and ensured the processes met international quality assurance and hygiene standards. Schindel, the plant general manager, indicated the company regards this new layout as a technological trade secret. While the processing facility was being rebuilt, KAF sold the caribou meat to another company located in the South.

The product line had everything from frozen to value added. KAF cuts, bones, vacuum-seals, quick-freezes, labels and boxes the meat. The company featured prime cuts from the fleshy hindquarters such as Tenderloins, 7-bone French Racks, and Denver Hinds primarily for restaurants. It also processed meat for ready-to-eat, shelf-stable,

salami, jerky, and Mikku (a traditional dried meat with no salt and no preservatives). The caribou products were marketed under the brand name *Tundra Brand Caribou* (KAF, 2003a; KAF, 2003b).

In 1999–2000, the inventory was not moving and KAF needed the cash flow to service the debt. Schindel commented that the Board and major shareholders had indicated to KAF that the debt must be fully paid down before the next year's harvest to protect the integrity of the company. Schindel felt that KAF needed the opportunity to sell the caribou products elsewhere if it could not sell in North America.

In Canada, if meat was consumed within the province or territory it was produced in, mandatory inspection was not required. However, when crossing inter-provincial borders, the animal had to be slaughtered and processed in a federally registered plant. Federal inspection was done under the authority of the Canadian Meat Inspection Act and Regulations and was conducted by officials of the Canadian Food Inspection Agency (CFIA.) These regulations contained strict facility construction and sanitation standards to ensure safety of the meat/meat product and required inspection of each animal and carcass before and after death. The CFIA made an on-site inspection of KAF's Rankin Inlet plant facilities every three weeks. They also worked on-site during the Coral Harbour harvest. When KAF started exporting to the USA, not only was CFIA's inspection necessary, but the documents had to be signed by a veterinarian. KAF therefore required a veterinary inspector on-site at all times. Additional CFIA inspectors came to Coral Harbour and were on-site during the annual caribou harvest.

## **7 Nunavut Development Corporation**

In 1999, when Nunavut was created, the Nunavut Development Corporation (NDC) was formed to continue the operation of nine subsidiary development companies operating in the Baffin, Kivalliq and Kitikmeot regions and seven Nunavut communities. It is a crown corporation of the Government of Nunavut (GN). According to John Hickes, President of NDC in the NDC Annual Report, "by design and intent, it's not to make any profit at the outset. If it was profitable the private sector would step in and do it". The mandate of the NDC is to create employment and income opportunities for residents of Nunavut; to develop, maintain and stimulate the growth of local businesses and promote economic diversification. To this end, NDC focused on value added exportable products that utilised the unique talents and resources of Nunavut. This included the responsible development of businesses in the arts and crafts, clothing and meat and fish sectors.

More than 525 Nunavut residents were employed directly as employees or indirectly as harvesters or cottage workers in NDC businesses. Five companies specialise in arts and crafts; four companies specialise in meat and fish processing of wild char, turbot, caribou and musk-ox. KAF was one of these companies.

The NDC improved the quality of life by providing for the company's economic viability but also economic returns generated through jobs created and the training received.

"...The NDC, through financial support by way of direct purchasing, subsidy funding, and capital and venture investments works to responsibly develop territorial sectors by establishing an economic presence in Nunavut communities. Ultimately the goal of the NDC is to develop self-sustaining, locally controlled enterprises, built upon unique Nunavut products that such

industries generate. Many of the businesses that operate in these market sectors are not and may never be profitable and hence unable to survive without the ongoing financial support of the NDC. The NDC evaluates its fiscal standing in each investment by measuring the ongoing economic return generated through job creation and the cost to create such jobs.” (NDC, 2003)

Inuit people have gradually gained the knowledge and skills to take over control of the businesses. In 1992, the North West Development Corporation had two or three Inuit people on each board of its subsidiaries. Today, all the boards of the subsidiaries of NDC are made up of Inuit people. Also, all of NDC’s companies have professional Inuit management and a nearly total Inuit workforce.

## **8 Expanding the market**

KAF received federal approval in 1995 for a commercial licence to sell caribou across inter-provincial borders through out Canada. The caribou industry was very small as the meat was very expensive to harvest. At start-up, the concept was great – to sell plentiful local fish and game. One issue was getting the harvest up to a quantity where customers knew there would be a steady supply.

KAF had other competitors which sold caribou. According to Schindel, Northern Quebec had hit and miss harvests because its herd migrated and the harvests ranged anywhere from 1500 to 3000 caribou. Customers were leery of locking into a deal and then not getting the product. In 1998, the company had four slaughterhouses costing \$3.5 million idle. It only had Quebec certification so it could not market the meat outside Quebec as the plants did not meet Canada’s certification standards (George, 1998). The company had received considerable government support to upgrade its facilities. It also refocused on building its harvest numbers up so NAF could assure a sustainable supply for its customers (Lawrence, 2000). Schindel felt this competitor’s attention to quality control and cuts were not as good as KAF’s. Customers had returned their product and then asked for KAF’s. The Nunavut company had adopted a clearly identifiable and distinctive yellow label which was attached to the vacuum wrap meat products to distinguish itself.

Another competitor, the Labrador Inuit Development Corporation had been hunting caribou for export within Newfoundland since 1986. They had operated a caribou meat processing facility since 1988 in Nain, Labrador. An Inuk was trained as a meat inspector and certified as a federal inspector so the meat could be sold beyond the provincial boundaries. The Labrador plant suffered structural damage from permafrost and had to be closed. Then the caribou herd changed its migration patterns and it was not economically feasible to rebuild the plant.

In the USA, the caribou is not wild but farmed. Caribou are a protected species in Alaska and the meat cannot be sold. However, when caribou and reindeer have inter-mingled, the meat may be sold as reindeer meat. Alaska currently had no operating USDA approved processing plants.

Traditional Inuit foods such as caribou, musk-ox and char were viewed as exotic foods in the South. Many Southern consumers were still hesitant to buy an unfamiliar product, particularly one that may cost more. KAF was the first Canadian company to export caribou to the USA. KAF initially saw its main competition coming from other

exotic meats, such as buffalo, deer, emu and ostrich. Schindel indicated, “It’s a tough business. It is a select market and you have a select clientele. It can also be very volatile”. A good portion of the company’s product went to resorts like Banff, Alberta, Canada and Vail, Colorado, USA. Other key customers included upscale hotels and restaurants. KAF had never really focused into the retail market like large grocery chains. The company had realistically assessed its distance from markets. Its production capacity would serve more than 1000 restaurants as customers. By developing a network of 20–30 distributors, KAF had fewer customers to serve thus saving on invoicing, collections and service while extracting more value. The high costs associated with its Nunavut location also required an up-scale niche market willing to pay more for the caribou products.

In 1999, Manitoba sponsored a 3-day trade mission to Nunavut consisting of 45 business people. The Manitoba Food Development Centre (MFDC), a provincially owned body signed an agreement with KAF. MFDC would provide assistance in research and development for creating or diversifying their product base, for troubleshooting and optimising the caribou processing, developing a program for Hazardous Analysis of Crisis and Critical Points (HACCP), and developing nutritional labelling. The company was looking for help in marketing caribou and char to Manitoba and Western Canada. They also were looking at developing more sophisticated and refined food products. Other clients of the MFDC had included Nestles, McCains and Maple Leaf Meats (Wilkin, 1999).

## **9 Growing global**

Schindel knew the company had to expand globally to take advantage of the world market. The company first decided to explore selling in Europe. In estimating the target market potential for KAF’s products and the related marketing objectives of our company, it was well-known that the USA, Germany, France, and England enjoy game meats. Each country had a large population, with many game meat distributors. Kivillaq’s products would compliment an existing product line of game meats by offering wild caribou.

According to Schindel:

“You have to know the market and what your product is up against in selling in the market place and what the product competition is going to be....Not only is this an opportunity to present our product to potential customers, but we’ll also see what other products we compete against look like, how they’re packaged, distributed, all these different aspects.”

Schindel commented that as a subsidiary of NDC (a Crown Corporation), KAF could not receive federal funding. KAF was a member of the Quebec-based First People’s Business Association (FPBA). This organisation actively promoted the development of networking to stimulate strategic business alliances/partnerships between Aboriginal enterprises themselves and with the general business community both nationally and internationally. Through FPBA, KAF was able to take advantage of funding from Aboriginal Business Canada (ABC) for trade shows.

KAF was part of the Aboriginal Pavilions located in the Canadian Pavilions in the Team Canada Trade Missions to Russia and Germany. Also, it was one of four Canadian Aboriginal companies featured at ANUGA 2001 Fair and Trade Show in Cologne,

Germany. ANUGA was the largest food and beverage products trade show in the world with more than 6400 exhibitors and 144 countries participating (INAC, 2001). They also participated in Salon International de l'Alimentation, des Boissons, des Vins et Spiritueux (SIAL) show held in Montreal 2001 and again in 2003. FPBA had also organised the special Aboriginal Pavilion. Industry Canada, through the ABC programme and the Quebec Office of Indian and Northern Affairs and the Economic Development Programs Directorate and Agriculture and Agri-Foods Canada co-sponsored the cost of constructing, coordinating and marketing the pavilion (ITC, 2003).

According to the Aboriginal Trade Commission Office, the trade shows' objectives were to establish presence and enhance visibility, identify new markets and potential buyers, follow up on leads from SIAL Montreal 2001 Food and Beverage Trade Show, generate sales, identify new distributors and support existing ones and gain international trade show experience. During the trade shows, KAF participated in product tasting, sponsored dinners and receptions and meetings with selected distributors. For the Western Canada Trade Mission to Texas and California 2001, KAF's caribou meat was served at receptions and dinners (Rideout, 2001).

KAF paid for its own market research. Travel expenses for participation in the international food shows and trade missions were paid for by the Territorial and then Nunavut governments. KAF sourced potential contacts utilising Canadian International Trade Commissioners and consulates of Foreign Affairs and International Trade Canada and contacts of Agriculture and Agri-Food Canada in the target countries. By meeting with potential export contacts, KAF started to determine product specifications, product integrity, and price comparables. Schindel commented:

"We learned our product would have to be cut and packaged specifically to the needs of targeted distributors. Potential clients liked the meat vacuum-sealed and quick frozen in small quantities. Some cuts had to have the fine covering skin removed. (This is called 'blue skin' in Europe and 'silver skin' in the US). The market research also indicated a very strong interest in caribou jerky. Importers and their customers were also very concerned about contaminated meat and genetically modified foods."

The company prepared market comparisons for prices and cuts of wild caribou with farm raised game meats (see Tables 1 and 2). The caribou products would be quite expensive as Kivalliq intended to sell to wholesalers who sold to high-end restaurants.

**Table 1** Product integrity

<i>Product name</i>	<i>Tenderness</i>	<i>Nerve</i>	<i>Blue (silver) skin</i>
Strip loin	T	0	Off
Tenderloin	T	0	Off
French rack	T	0	Off
Legs	T	2	Some
Denver hinds	T	1	Off
Shoulders	M	3	On

Notes: T = Tender; M = Medium  
0 = Least; 6 = Most

The vast majority of food laws of the European Union members had already been fully harmonised. Based on the EU single market principle, all foods legally imported and distributed in one member country of the EU could also be distributed in all other member countries, except in those cases when a country could prove health concerns. To export the caribou meat products, Schindel knew it would be important for KAF to seek and maintain EU certification. In focusing on the export market, Schindel realised the extreme importance of meeting the regulatory procedures and requirements of each country and these regulations could vary greatly from one country to another. Equipment, cutting techniques, facilities, packaging and labelling – all must meet international regulatory guidelines for consumer health and safety. For example, according to the USDA, for exporting from the USA to Europe, the labels required the specification of the nutritional content for particular meat types, different bar codes, list of ingredients, genetically modified ingredients, quantitative ingredients declaration, metric weights and measures, shelf life, storage conditions, place of origin, contact details, and lot marking. The labels also had to be translated and required different dimensions (USDA, 2003a; USDA, 2003b).

**Table 2** Price comparables on meat products (prices quoted in Canadian \$ per pound of weight)

<i>Product type</i>	<i>Caribou KAF</i>	<i>New Zealand Deer</i>	<i>New Zealand Deer*</i>
Hips (shank off/boneless)	\$8.51	\$6.20	\$6.33
Denvers	\$10.41	\$7.69	\$7.89
Tenderloins	\$19.55	\$12.95	\$13.15
French rack	\$19.55	\$11.20	\$13.61
Strip loins	\$19.55	\$11.55	\$13.61

Note: \*Table contents in the two columns for New Zealand Deer are accurate and taken from Brian Schindel’s Kivallik Arctic Foods presentation delivered at the Native Investment and Trade Conference held in Saskatoon, Saskatchewan in 2001 (see Schindel, 2003).

European certification would be difficult to obtain and maintain. EU inspectors would still have to give their final approval. They would review all the documentation, perhaps make an on-site inspection, and give limited two-year approval. Schindel realised the certification process could be summed up as ‘costly’ and ‘loads of paperwork’. Everything about the animal slaughter and processing would need to be documented and approved. Transportation requirements, sanitation, temperature, water sampling, inspectors on location, and specialised staff training – the list went on. Even the employees needed health certificates to show they were acceptable to work in a meat processing facility. This would not just be a one-time thing. The red tape would be continuous (Howatt, 2003a; Schindel, 2004). According to Schindel, “Random spot inspections of the plant could still be done by the Americans or the Europeans at any time”. Coral Harbour has the caribou, the Inuit hunters and the only portable abattoir certified by the European Union. Rankin Inlet has the only wild game processing plant in North America certified by the European Union. Together the communities process the world’s largest commercial game harvest.

When Mad Cow Disease (Bovine Spongiform Encephalopathy or BSE) hit in May 2003, caribou were affected just like beef cattle as they are ruminants. A ruminant is a hoofed animal with a compartmentalised stomach that chews its food. The USA along with 35 countries issued an embargo on Canadian beef. The USA which represented about 30% of KAF's meat market, closed its borders. Compared to beef, the ban on Nunavut's caribou could be seen as minimal. However, the revenues lost represented about \$400,000 annually – a large portion of the exports for the Nunavut economy (CBC News, 2003; Greer, 2003a; Puglia, 2003). Nunavut officials met with their US counterparts. The Canadian Food Inspection Agency also participated by presenting documentation and scientific studies. After the negotiations, KAF's caribou meat and products were exempted because of the geographic isolation of the herds, the nature of the feed (diet of lichens and willow), and the distinctive product status (wild game) (BQCMB, 2003c; Poole, 2003).

As a result of BSE, in the 2003 harvest at Coral Harbour, the CFIA was a lot stricter to increase hygiene and quality assurance. One veterinarian and two CFIA inspectors were on the site at all times. There was also an on-site a Quality Control expert from Alberta (Greer, 2003b). CHDC also made substantial investments in infrastructure to up-grade the facilities for equipment such as boot washers, sanitisers, stainless steel knives and cutting tables, hot water heaters, lighting, electricity, and digital recording equipment.

## 10 Aboriginal/Inuit branding

The company created a website to increase its market and establish a stronger Inuit brand. The wording of the advertising stressed 'Quality', 'Land', 'Wild naturally', 'Truly wild' and 'Organic'. KAF reinforced that caribou eat lichens and willows not touched by pesticides. It also associated the product with the romance of the north, the product was harvested and processed by Inuit of Nunavut. Along with its name change, KAF changed its logo to use images associated with the Inuit – the northern star, inukshuk and igloo. At the trade shows, the KAF booth at the Aboriginal pavilion featured an Inuit employee wearing traditional styled Inuit clothing. As well, the northern star, inukshuk and igloo were prominently displayed in the background.

The following paragraph contains excerpts from the KAF (2003b) website:

“Even today the caribou roam wild, on an island. We harvest the caribou in the wild. The caribou that we process have not been confined or herded, nor are they held captive in any way. The *wild* caribou feed on lichen in the wilderness in their natural habitat, using the nutrients that the earth has given forth as their sole source of energy. Purchasing caribou from Kivalliq Arctic Foods you are participating in the Romance of the Tradition, that has sustained the Inuit people, for the past 2000 years. Eating Caribou is eating Natural! No Hormones!! No Chemicals!! It is also non-genetically modified wild game meat....The company's caribou meat is harvested from animals that have never been confined or herded. This natural organic quality....”

To broaden, its potential client base the KAF advertised the caribou products with the Virtual Aboriginal Trade Show at the URL <http://www.aboriginalcanada.gc.ca/abdt/apps/vats2.nsf/splash.html>. Clients can read the text in several languages including French, Russian, German, Spanish, Italian, Chinese, and Korean. See Figure 1 for an illustration of the website.

The Aboriginal International Business Development committee developed the *Directory of Aboriginal Exporters 2002* to increase the level of participation of Aboriginal firms in exporting activities. KAF had a listing in the directory. The firm was also added to the *World Network for Exports (WIN Exports database)*. This is used by trade commissioners around the world to source products and services from Canada (FAIT, 2006; WIN Exports).

'Le Toit du Monde' is a quarterly magazine with 6000 copies distributed across Canada and in Europe, primarily France. The Nunavut Economic Development and Employability network (RDEE) developed a partnership with the magazine to run a special four-page centre insert on entrepreneurship in Nunavut. The feature article in June 2002 was about the marketing of game, a potentially promising industry for new Francophone businesses and highlighted KAF. The Premier of Nunavut, Hon. Paul Okalik had suggested the topic as a means of supporting market development efforts in Francophone countries, particularly France (NCCFHRD, 2002).

**Figure 1** Kivalliq arctic foods' listing at the virtual aboriginal trade show



Source: <http://www.aboriginalcanada.gc.ca/abdt/apps/vats2.nsf/splash.html>

Value added processing was 15% in 1995–1996 but had grown to 100% by 2005. Within five years, exports of game meats, caribou and musk-ox to the USA exceeded \$840,000 and an additional \$210,000 was exported to Europe in 2003.

## 11 Expanding into other products

Antler velvet and antlers are in international demand today. As animal protection organisations pressured to restrict the use of elephant, rhinoceros, tiger and walrus products, Asian and other markets have looked globally. In 2003, Richard Connelly,

Manager of the CHDC posted an advertisement globally on the internet for buyers interested in caribou antlers. A week later inquires had come from Taiwan for antlers, tails, tendons and penises. Other calls came from China, Germany, Australia, and the USA (Howatt, 2003b, p.10). There was interest from the USA and Asia in antlers, bones, and sex organs. The powder is used in soups and medicines. KAF now sells antlers from younger animals in the south. The Buyer wanted them cut into small chunks, boxed and then shipped. (Greer, 2004). Some Inuit people were upset by selling the antler parts. They are also looking at using the felt from the antlers to produce blankets or boot liners (INAC, 2006).

Since 1997, the Hamlets and Communities of Kivalliq Region and the Government of Nunavut have organised annual trade missions to Manitoba to establish new business contacts and strengthen relationships. The Kivalliq Chamber of Commerce has participated in these. One area of partnership resulted in the introduction of a tanning and taxidermy skills training programmes in 2003.

## **12 Sustainable development**

According to Marten (2001), "A healthy society gives equal attention to ecosystem health, economic development, and social justice because they are all mutually reinforcing". Having experienced shortages of game, hunters and trappers are very concerned about sustainable resource management. The Hunters and Trappers Associations were formed in the 1970s. They also participate in co-management bodies including the Nunavut Wildlife Management Board, the Nunavut Planning Commission, the Nunavut Impact Review Board, the Nunavut Water Board, and the Nunavut Surface Right Tribunal. Under the direction of the Inuit, these government bodies oversee how the land and water are used, and how wildlife is managed and preserved in the Nunavut Settlement Area (Aglukark, 1999).

Kivalliq Arctic Foods, and Nunavut as a whole, practise resource management to ensure a lasting supply of caribou for their clients and business partners. And thus, KAF claims, "...quantities are limited being a wild resource. But we always will have product available for sale to our client base, because of our commitment in protecting the resources of Nunavut".

The Nunavut Wildlife Management Board sets quotas for the hunts and looks at issues of herd sustainability. Recent minutes show the Board addressing issues such as summer and winter range, available forage, return of the wolf as a natural predator, increasing effectiveness of the harvest, determining the maximum radius serviceable by any particular abattoir (one Inuit hunter had suggested a 20-mile radius otherwise logistics made it impossible to take the full quota). The Board also has examined inter-settlement trade for those communities where wolves and other circumstances had reduced the herds. The Board's five-year resource management strategy includes combining traditional and scientific knowledge; careful herd management (measurement, quota's and female kill ratio); controlling business and economic growth; examining industry sector interactions; periodic reevaluation. Summer (2005) in reviewing the on-going sustainability of the caribou harvest and related agri-food processing suggested increasing efficiency and extracting more value; holding broader stakeholder engagement and dialogue sessions to discuss on-going sustainability; documenting impact of

climate change and also bio-chain concentration of chemical pollution from south; and participating in major studies, *e.g.*, World Wildlife Federation; Arctic Studies; Circumpolar Studies.

The Nunavut Government in summer and fall of 2005 completed two studies to determine the economic viability of the commercial caribou harvests in Kivalliq and Nunavut. The caribou populations have been declining as well costs associated with the harvesting, processing, marketing of the caribou have increased substantially. The priority was to ensure the increased commercial harvesting levels will not affect the future of subsistence hunting (Connelly, 2006). Funding for both studies came from an Agricultural Policy Framework Initiative.

### **13 Impacts**

Robert Connelly of the Nunavut Government Department of Economic Development provided the following information on the socioeconomic impacts of the caribou harvest and processing.

This is Coral Harbour's biggest project of the year. At peak, it employs 68 Coral residents for six to ten weeks. Ninety-nine percent are Inuit. Eighty percent of those employed return each year. The annual payroll is about \$500,000 Cdn in direct employment. The majority of camp workers put in enough hours to qualify for employment insurance benefits – \$150,000 Cdn. Economic spin-offs are a minimum of \$2.9 Cdn. million (\$650K × 4.5) for this non-decentralised community. The harvest maintains an infrastructure investment base of \$500,000 Cdn. It also maintains and builds on a strong reserve of expertise among local residents. The harvest also helps keep caribou population in control (which is the purpose of the hunt).

For Rankin Inlet, 12 full time positions have been created. All employees have qualified for medical clearances. The payroll is approximately \$300,000 Cdn. Economic spin offs are a minimum of \$1,350,000 Cdn for the community annually. This activity maintains a significant component of Rankin Inlet's industrial infrastructure. It also maintains a market for caribou which has been built up from 60 000 lbs. to over 220 000 lbs. per year. The result is over \$1,000,000 in export earnings coming into Rankin Inlet. This project maintains the investment in acquiring EU certification. This is a flag ship enterprise for the community of Rankin Inlet.

Kivalliq's caribou products have come to be strongly associated with the territory of Nunavut. According to Darrin Nichol of the Nunavut Development Corporation, "that's important because Nunavut doesn't have a lot out there in the marketplace. The product represents Nunavut and Canada. These areas don't show up on a balance sheet" (Greer, 2005).

### **14 Conclusion**

#### *Contribution to indigenous entrepreneurship research*

The field of Indigenous entrepreneurship is emerging. This case study provides an opportunity to explore the development of one sustainable Inuit enterprise based on the caribou – a keystone of the Inuit food chain. However, the future sustainability of

this Inuit enterprise may come into question as increased resource based economic development such as mining, oil and gas, diamond extraction or northern tourism put pressure on the caribou. It would be interesting to examine how other medium and small Inuit enterprises which harvest, process and market caribou have adapted and innovated to demonstrate resilience. Additional research might also examine the processing of caribou by Inuit women, the various products made from the caribou, and the value/impact of these economic activities. Future research might also compare the development of Inuit enterprises using caribou as the input resource but within different regulatory environments, *i.e.*, Nunavut, Quebec, and Labrador in Canada. Has government policy resulted in different patterns of Inuit entrepreneurship. Future research could also compare enterprises using caribou/reindeer as the input resource within different Indigenous cultures such as Dene, Sami of northern Europe and Russia, and the Tsaatan (or Dukha) people of north-western Mongolia.

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## Note

1 Statistics Canada, 2004 based on 2001 Census data.